

Brief Report of UNITWIN Network in Distance and Open Learning

Cases of Innovation of Teaching and Learning



United Nations
Educational, Scientific and
Cultural Organization



UNITWIN Network in Distance
and Open Learning (East Asia)
Shanghai Open University



The Learning Design & Course Creation (LDCC) Workshop

Case Provider: The Open University, United Kingdom

01

Project Overview

The LDCC Workshop is a professional development (PD) initiative. It draws on the open and distance learning (ODL) principles for online module design currently in practice in the STEM Faculty at the UKOU. The UKOU has a long relationship with the Chinese OU network and ODL sector. Since 2014 this relationship has included staff from the UKOU facilitating the LDCC Workshop as PD activity, in the UK, China and more recently online. By Dec 2021, nine different institutions had participated in 29 instances of the LDCC Workshop. These institutions are: The Open University of China, Shanghai Open University, Jiangsu Open University, Guangdong Open University, Sichuan Open University, Jiangxi Open University, Hubei Open University, Beijing Medtime, and East China Normal University.



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Highlights and Innovative Points

The LDCC Workshop aligns learning design frameworks with constructivist and student-focused pedagogies to support the changing professional teaching identities of participants. It has been primarily designed for implementation in Chinese ODL environments but is transferable into different cultural contexts.

Participants are organised into teams and work together to tackle the practical, real-world challenge of designing and creating an ODL course together. Structured activities are introduced to guide the teams in making grounded decisions throughout the process. Throughout the 20 hours of the LDCC Workshop, teams spend at least 20% of their time discussing and critiquing LDCC approaches presented to them, establishing their own views, and constructing contextualised knowledge and meaning. They finish by presenting their course to their peers.

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Challenges and Countermeasures

Challenges to development and implementation have included adapting the workshop to the different contexts of the host institutions and addressing cultural differences. COVID-19 has meant that since 2020 recent instances of the LDCC Workshop have been delivered remotely with facilitators based in the UK.

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Support and Achievement

By Dec 2021, around 750 Chinese staff had participated in the LDCC Workshop, and several academic papers have been published based on this work (see references list). 18 in-depth interviews with past participants are currently being undertaken to gather further detailed qualitative data on the impact of the LDCC Workshop on the professional teaching identities of Chinese staff. Future publications are also planned.

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Work in the Next Stage

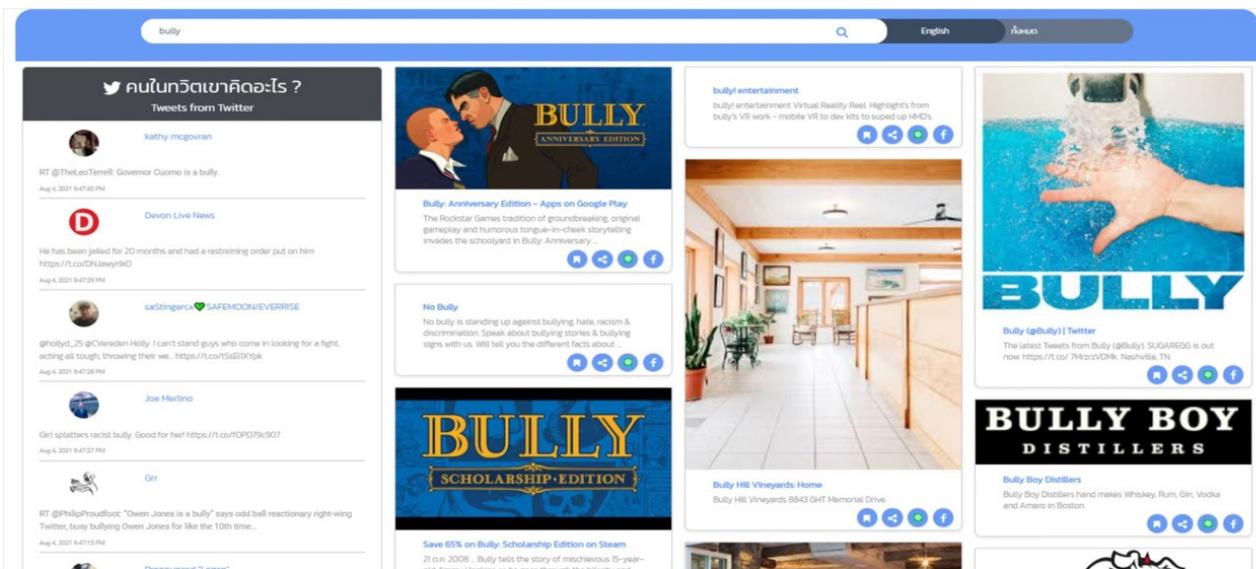
The LDCC Workshop team are very interested in collaborating with other member institutions of the UNESCO UNITWIN Network in Distance and Open Learning on issues around learning design, course creation, quality, and professional development in ODL.

Smart Search

Case Provider: Sukhothai Thammathirat Open University, Thailand

01 Project Overview

The Smart Search Center (SSC) project was initiated for the professional development of Thai teachers. It aims to reform learning management in the form of a Professional Learning Community (PLC) based on actual work rather than training. This system can be utilized in Thailand to drive and change educational management at the school level.



The SSC concept was created to apply tools that are consistent with the digital era's user experience. The developed system is intended to handle a wide range of user behaviors that change fast. The SSC was designed with an emphasis on user experience in the following areas:



Graphic Design

The web application's appearance is designed to be attractive and uncomplicated, using international symbols.



Usability

A support system for learning resources and learning activities in the form of a web application can be accessed by a username or Facebook user ID. Users can access the stored data easily.



Accessibility

A system supports the operation and display of content via smartphones and tablet computers, anywhere and on any device. Users can access and search for information just by connecting to the internet.



Information Design

The system can search the internet for instructive video clips and other learning resources that teachers can use to learn and practice on their own. The system functions similarly to a search engine, but it filters educational information. The algorithm then organizes and puts popular information into a websites and video clip category. It can also show all of the contents as needed.



Interface Design

Menus are designed to be easy to use with symbols and text. In addition, the system will present and share information in the form of integrated one-page learning content that users can continue to read.



Interactive Design

Users can choose to store the content of their interests by storing it in their own learning pages, which were built into the repository that can be categorized by themselves. Users can share the content with other people via email, smartphones and social networks.

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Challenges and Countermeasures

In the trial, simultaneous access caused a delay in rendering. The problem has been solved by having users log in at different times. Also, the availability of technological equipment for each user to share knowledge caused limitations on the strength of the internet signal at home. Some people solved problems by experimenting with smartphones that had a stronger signal.

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Support and Achievement

This project was designed in cooperation with Silpakorn University. The stakeholders are educational supervisors, teachers, and experts in instructional technology. The implementation was conducted with 28 random schools.

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Work in the Next Stage

It is followed up through social media with the experimental group of 12 schools in order to gain results after the use of the system for teaching. The experiment was expanded and the learning network was developed with the additional 16 schools.

Ocean-related practical talents training & development for building a leading modern

Case Provider: Qingdao Open University, China

01

Project Overview

The project brings into play Qingdao's nationally famous marine scientific research advantages, brings together national academicians and famous experts in the marine field in Qingdao, and creates the best and most cutting-edge marine distance courses in China, which include the most cutting-edge marine knowledge and stimulate adult students' enthusiasm for learning, so as to achieve "everyone can learn everywhere and all the time" in a wider range, and provide citizens with opportunities and platforms to learn marine knowledge. The project is implemented in Qingdao, China.



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Highlights and Innovative Points

In order to gather high-quality resources and deliver quality education with the aim of cultivating qualified personnel for China's maritime power strategy and building Qingdao into a global marine center city, the University launched "academician lecture hall" for marine education. It has been broadcast simultaneously to the faculty and more than 50,000 students of Qingdao Open University and Qingdao citizens. This is the top-notch famous teacher class of marine education created by the School of Oceanography jointly established by the Qingdao Open University and the Open University of China. Relying on the education system of the Open University of China, the impact of Qingdao famous teachers of marine education is far-reaching to the whole country. At present, academician Hou Baorong of the Chinese Academy of Engineering and Academician Wu Lixin of the Chinese Academy of Sciences are invited to give lectures, which have received warm response from students. "Academician lecture hall" will be a beneficial supplement to the healthy and orderly development of marine education, and provide sustainable source and power for marine talent training.

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Challenges and Countermeasures

It is necessary to improve the ability and performance of practical teaching. We regularly organize students to conduct on-site teaching in enterprises, truly integrate theory with practice, and improve students' practical ability. With the most cutting-edge marine science and technology and marine knowledge, we improve students' marine awareness and practical capability, and cultivate more talents for caring about, understanding and managing the ocean.

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Support and Achievement

Since the School of Oceanography of the Open University of China was established in 2014 with the support of Qingdao Open University, it has been committed to the faculty building and curriculum development for talents training related to marine education, so as to constantly meet the local needs of ocean-related talents in Qingdao, which was supported by the Open University of China and Qingdao municipal organs and scientific research institutions at all levels. Qingdao Open University, together with the Pilot National Laboratory for Marine Science and Technology (Qingdao) and the Institute of Oceanology, Chinese Academy of Sciences, has jointly built a "Qingdao marine faculty" and a new hub of marine online education, which strongly influence the Jiaodong economic circle and the system of the Open University of China, and build a deeper talent pool for regional marine economic development and national marine strategy.

The project served more than 50,000 teachers and students of Qingdao Open University and numerous audiences of the network broadcast. It improves the general marine education, and helps people understand the frontier progress of marine scientific research and the significance of the ocean to China and the world.

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Work in the Next Stage

Famous experts and scholars will be invited continuously to launch more high-level courses in a variety of characteristic marine disciplines such as marine biology, marine ecology, physical oceanography, marine geology, marine chemistry, fisheries and marine medicine, so that students and the general public could have a systematic understanding of the whole marine science, and have an in-depth understanding of the frontier fields related to the ocean. At the meantime, it is also the University's plan to integrate these high-quality curriculum resources with community education, especially to take the initiative for the elderly groups who have difficulties in using the Internet to accept marine education in a way they like, so as to effectively improve their relevant scientific literacy and environmental awareness.

The project requires cooperation with other member institutions of the UNESCO UNITWIN Network in Distance and Open Learning that have ocean-related resources or ocean-related education needs.

OMO Smart Learning Center

Case Provider: Shanghai Open University, China

01

Project Overview

With the goal of building online and offline full-scene teaching, OMO Smart Learning Center adopts integrated equipment and technology to realize online and offline real-time teaching and learning. It integrates smart environment, smart learning, smart management, smart service and other functions, supports complete closed-loop education including teaching and learning, experiment, evaluation, management, and all normal smart perception and smart services, so

as to assist teachers in carrying out diversified teaching and provide good learning experience for learners' active and personalized learning. The smart learning center system of the headquarters plus 8 branches has been preliminarily constructed, and the interconnection, live interactive teaching and collaborative teaching in the smart classrooms of the headquarters and sub-centers have been realized.





Based on the PST framework and the organic integration of pedagogy, space and technology, and centered on learning results, the OMO Smart Learning Center has created the smart learning environment, and a flexible and personalized smart learning space that can support mixed scenes. It mainly integrates four aspects:

Integration of teaching and management

Integration of online and offline teaching resources, teaching process and formative assessment

Through integrating distance online learning and classroom smart learning platform, OMO builds an “integrated hybrid smart learning platform with online and offline real-time learning”. The platform highlights the integration of teaching and management, meets diversified learning needs, and effectively integrates learning resources, learning activities, media tools, teaching evaluation and tutors, so as to realize the flexible combination of multiple learning methods.

Classroom integration

Integration of face-to-face classroom and online learning

OMO smart learning environment combines various and changeable offline smart learning space with online learning space to meet the learning and services before, during, after and beyond class, thus providing full learning cycle services and whole process quality control, to support flexible learning, and promote students’ active learning.

Dual teachers

Human teachers with AI assistants

Smart teaching assistant has enabled Dual Teacher classes. OMO Smart Learning Center has established a collaborative teaching mode between teachers and AI assistants, realized the teaching community in the AI era, and provided learners with a more personalized online and offline intelligent learning place.

Data integration

Integration of data analysis in the whole process of online and offline teaching

The OMO smart learning environment requires the integration of data analysis in the whole process of online and offline teaching, and collects data both online and offline through IOT intelligent devices, smart classroom teaching systems, etc. Data-driven learning analysis and teaching evaluation can visualize the overall teaching evaluation and operation. Learning analysis and teaching evaluation can continuously adjust and optimize the Smart Learning Center and provide a full data feedback mechanism for it.

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Challenges and Countermeasures

The COVID-19 pandemic obstructs students from experiencing the offline learning at the OMO Smart Learning Center. The Center will continue to strengthen online collaboration and interaction functions, and effectively support multiple and mixed online teaching methods.

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Support and Achievement

The project was implemented by Shanghai Open University and received special fund from the Shanghai Municipal Education Commission. The sub-centers were supported by eight branches of Shanghai Open University, including Yangpu, Xuhui, Songjiang and Minhang No. 1 branch. The project also won the gold award for “outstanding cases of informatization construction and application in Shanghai colleges and universities” in 2021.

Since its completion in October 2020, the OMO Smart Learning Center has attracted IT education personnel from Shanghai and other provinces and cities in China to visit and study. In 2021, its headquarters have held 241 meetings of various kinds and received 82 visiting groups of fellow educators, with a total of more than 990 people, which were widely praised. In terms of teaching, 14,000 live broadcast sessions have been carried out in the headquarters and the branches, a total of more than 20,000 hours, and students' satisfaction rate reaching 98%.

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Work in the Next Stage

In the future, OMO Smart Learning Center will continue to improve from the three dimensions of P, S and T. In terms of pedagogy, it will center on learning effect, optimize the combination of flexible learning methods online and offline and various learning modes; In terms of space, it will create “next-generation digital environment” to provide more students with a flexible learning experience in a synchronous or asynchronous way online and offline; In terms of technology, a trusted technical support system will be established based on new technologies such as blockchain, multimodal big data analysis, holography, 5G, etc.

The project welcomes other member institutions of the UNESCO UNITWIN Network in Distance and Open Learning to participate in the research on the distance application and related topics of the Smart Learning Center.