Building a community-based cooperative e-learning platform

Purpose The living-lab projects preserve the wisdom and indigenous culture from tribal elders[3]. In this paper, a community-based cooperative e-learning platform has been built with the goals of data collection, preservation, and evaluation. **Method** A learning management system (LMS) is creates the cooperative e-learning environment. The LMS is featured in characterized discussion forums, shared teaching material, group corners, assignment, learning calendars, learning notes, assessments, and quizzes. There are several major functions applied in this scenario. Group corners are used for students, community workers, and staff to share ideas and files. Material sharing allows participates to deliver and collect multimedia files through the electronic cloud. Finally, cooperative proposals are collected through the LMS and evaluated by staff. Each click in the LMS would be recorded by the platform for further analysis. Community measurement is done by using the data-mining technique of activity logs. **Results & Discussion** We have tried to build this cooperative e-learning platform to facilitate the living lab project. Technology used in the cooperative e-learning platform is based on social networking, knowledge management, and groupware. Trained students are divided into groups to work with tribal elders. The students and tribal community workers are responsible for uploading results to the platform. Then academic staff or other experts can monitor them and provide feedback though the platform ubiquitously. The platform is able to deliver messages in text, audio, photos, or videos. The elders' oral history recordings are uploaded to the LMS. Groups are also required to submit health-improvement proposals, which can assist the elders by using the assignment function of the LMS. The digital footprints are also a basic function of the LMS. Cooperative learning is proved to be one of the useful strategies for Indigenous education.[2,3] Moreover, community and family are two powerful social connectors for tribal elders.[4] Interaction data gathering from the LMS is richer and more accurate. This platform used the advantages of community and cooperative learning. It provides a bridge between young talented students and tribal community and helps preserve tribal culture. Additionally, data can be collected efficiently. The works are important and significant.

References
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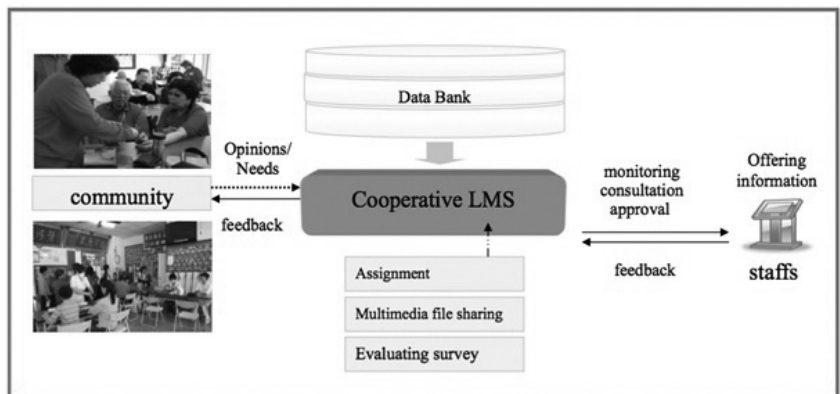*Address*: Taipei Medical University, Taipei City, Taiwan; *E*: wanhsu@tmu.edu.tw

Figure 1. The concept map of community-based Cooperative e-learning platform