

Constructing a Landing Page for Searching ANENT LMS and LOR Utilizing VIVO

Dooseong Hwang^{a*}, Kyungik An^b, Hyun-Pa Song^a, Youngmi Nam^a, Moon-Sung Cho^a, Hyeon-Jin Kim^a

^a*KAERI, 111, Daedeok-daero 989beon-gil, Yuseong-gu, Daejeon, 34057, Korea*

^b*Youl System, 101-201, 59, Jijok-ro 364beon-gil, Yuseong-gu, Daejeon, Korea*

**Corresponding author: dshwang@kaeri.re.kr*

1. Introduction

Asian Network for Education in Nuclear Technology (ANENT) is a regional partnership, supported by the International Atomic Energy Agency (IAEA), for cooperation in capacity building, human resource development and knowledge management in nuclear science and technology. The objective of ANENT is to facilitate co-operation in education related research and training in nuclear technology in the Asian region. ANENT member states are sharing of information and materials of nuclear education and training, and exchanging students, teachers and researchers. ANENT activities can be divided into 5 types. The first is to operate, maintain and update the ANENT Web-Portal, and manage and operate a learning management system (LMS) to support ANENT e-learning activities. Second is to prepare the e-learning process and manage e-resources. Third is to strengthen technical cooperation activities with IAEA and strengthen communication with other councils. Fourth is to manage the database and managing and promoting ANENT knowledge management activities. Fifth is to accommodate the needs of the member countries and to organize them. Of all the activities, ANENT has been carried out focused on cooperation, and sharing of information and knowledge for nuclear capacity building through education & training by utilization of e-learning platform in Asia and the Pacific region [1].

ANENT is constructing a new repository named Learning Object Repository (LOR), which is introduced with the idea of facilitating collecting of training an educational material beneficial for capacity building [2].

It was necessary to construct a landing page that functions as a platform such as connecting LMS and LOR operated by ANENT in one place. This paper is introduced a landing page that can search educational and training courses and materials in LMS and LOR by utilizing VIVO.

2. ANENT LMS and LOR

ANENT LMS (<http://lms.anent.online/>) was installed as an innovative tool for facilitating and promoting e-learning. LMS is regarded as the most modern and cost effective means to supplement traditional face to face education, and the way forward to provide member states with more opportunities to access valuable information and knowledge regardless of time and place.

ANENT LOR (<http://anent-lms.cloudapp.net/klor/>) is organized using a semantic approach. LOR's objectives were for disseminating the intellectual production of an institution and for long term access and preservation of the knowledge of the institution or organization. LOR is needed to respect right and ownership of the materials. It could implement semantic web extensions for keyword extraction and metasearch. Materials in the LOR could be a complete course, lecture, lesson, and bibliography [2].

3. VIVO

VIVO is a web-based, open-source suite of computer software for managing data about researchers, scientists, and faculty members. VIVO uses semantic web techniques to represent people and their work [3].

VIVO is member-supported, and an ontology for representing scholarship. VIVO supports recording, editing, searching, browsing, and visualizing scholarly activity. VIVO encourages showcasing the scholarly record, research discovery, expert finding, network analysis, and assessment of research impact. VIVO is easily extended to support additional domains of scholarly activity. When installed and populated with researcher interests, activities, and accomplishments by an institution, VIVO enables the discovery of research and scholarship across disciplines at that institution and beyond. VIVO supports browsing and a search function which returns faceted results for rapid retrieval of desired information. Content in a VIVO installation may be maintained manually, brought into VIVO in automated ways from local systems of record, such as HR, grants, course, and faculty activity databases, or from database providers such as publication aggregators and funding agencies [4].

4. Constructing a landing page

A landing page is named ANENT Cyber Learning Platform (CLP), which is front end for searching box, creating and finding course (link to ANENT LMS), how to do (help), sharing material, connecting to other databases (link to ANENT LOR), dashboard based on VIVO. ANENT CLP (Fig.1, <http://anent-lms.cloudapp.net/vivo/>) is an online platform that allows users to find educational resources easily and contains a learning environment to support instructor-led courses

and disseminate e-learning self-study resources to a wider audience.

ANENT CLP aims to facilitate sustainable education in the nuclear sector by empowering web-based development and dissemination of high quality e-learning resources and learning environments, in a way that is cost-effective, scalable and easy to use. ANENT CLP is to integrate available educational resources in synergy with existing nuclear knowledge based networks both within and outside the region and to promote the utilization of the ANENT e-learning platform for education and training making optimum use of information technology.

ANENT CLP consists of four main components:

- Search engine was created to help users find educational resources and opportunities easily in the LMS and the LOR.
- Self-directed LMS was designed to provide e-learning self-study materials for to a wider audience.
- Instructor-led LMS was developed to support and enhance instructor-led training courses for closed groups of students with online learning management features.
- The LOR was created to help users find educational resources and opportunities easily, based on users' needs and preferences.

The landing page was constructed to search educational and training courses and materials in the LMS and the LOR by utilizing VIVO. This was named ANENT CLP, which consists of front end for searching box, creating and finding course, how to do, sharing material, connecting to other databases, dashboard based on VIVO.

It is expected that ANENT CLP is to integrate available educational resources in synergy with existing nuclear knowledge based networks both within and outside the region and to promote the utilization of ANENT e-learning platform for education and training making optimum use of information technology.

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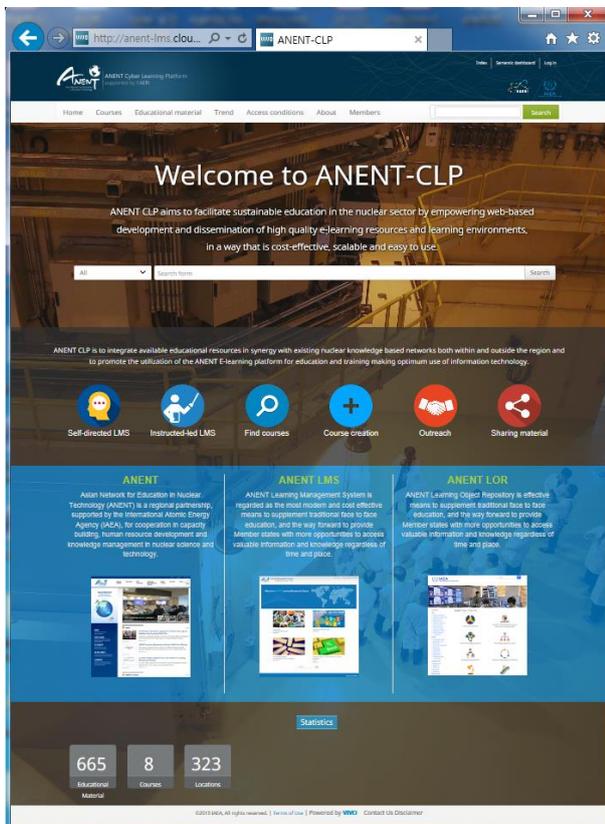


Figure 1. A landing page – The ANENT CLP

5. Conclusion