Research on Construction of Learning Ecosystem of Network University

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Abstract. Enterprise network university is a knowledge service institution that can enhance the competitive advantage of enterprises. In the era of knowledge economy, the important task that enterprise universities face is how to realize the transfer, sharing, evolution and proliferation of knowledge, so as to better integrate the various resources of the enterprise. Based on the theory of network learning ecosystem, this paper analyzes the components of the network learning ecosystem, studies and constructs the enterprise network learning ecosystem.

Introduction

The network learning ecosystem is composed of learning community and learning environment. The network learning ecosystem provides the learning community with a learning environment for communication and collaboration and makes them a unified and coordinated complete unit.

The era of "Internet +" has arrived. The Internet and education have been continuously integrated and developed. The traditional learning mode based on face-to-face teaching is gradually being replaced by online network training. Network training has the advantages of low training cost, high training coverage, and promoting knowledge management. According to the guiding ideology principle of "unified construction, top-level design, and step-by-step implementation", the State Grid Corporation established the SG Network University. The learning resources of SG Network University cover all the majors, positions and personnel of the company system, and can realize the functions of online training project management, network training resource management, online examination management and so on.

By realizing the balance of enterprise network learning ecosystem in the deepening application of network university construction, the network training mode was broadened, and the training incentive mechanism and resource contribution mechanism were established, which effectively solved the problems of training standardization, training efficiency and training driving force, and the company knowledge management and training management mode were innovated, the training costs were reduced and the training needs of the whole staff were satisfied

Overview of the Network Learning Ecosystem

The Composition of the Network Learning Ecosystem

The network learning ecosystem is a dynamic and open system. The main structure includes the network learning community and the network learning ecological environment. Therefore, in building a balanced and sustainable network learning ecosystem, it is necessary to strengthen the interaction between the learning community and the learning environment, and pay attention to the formation and maintenance of the network learning ecosystem.

The network learning community mainly includes learners (remote learners) and facilitators (teachers, experts, and mentors). In order to complete the learning tasks together, members of the learning community can communicate and exchange in a timely manner through the network and communication tools during the learning process. The learning community, while acquiring

knowledge in the process of learning, forms interpersonal connections of mutual influence and mutual promotion by sharing knowledge and learning resources, ideas and learning experiences and so on, and constantly improves its learning ability.

In the process of network learning, all the factors related to learning activities and affecting learning and learners are referred to as the network learning ecological environment. Network course is the main form of learning activities carried out by learning community in network learning. In the network learning ecological environment, the learning community participates in learning activities and interacts with the learning environment to complete the meaning construction of knowledge.

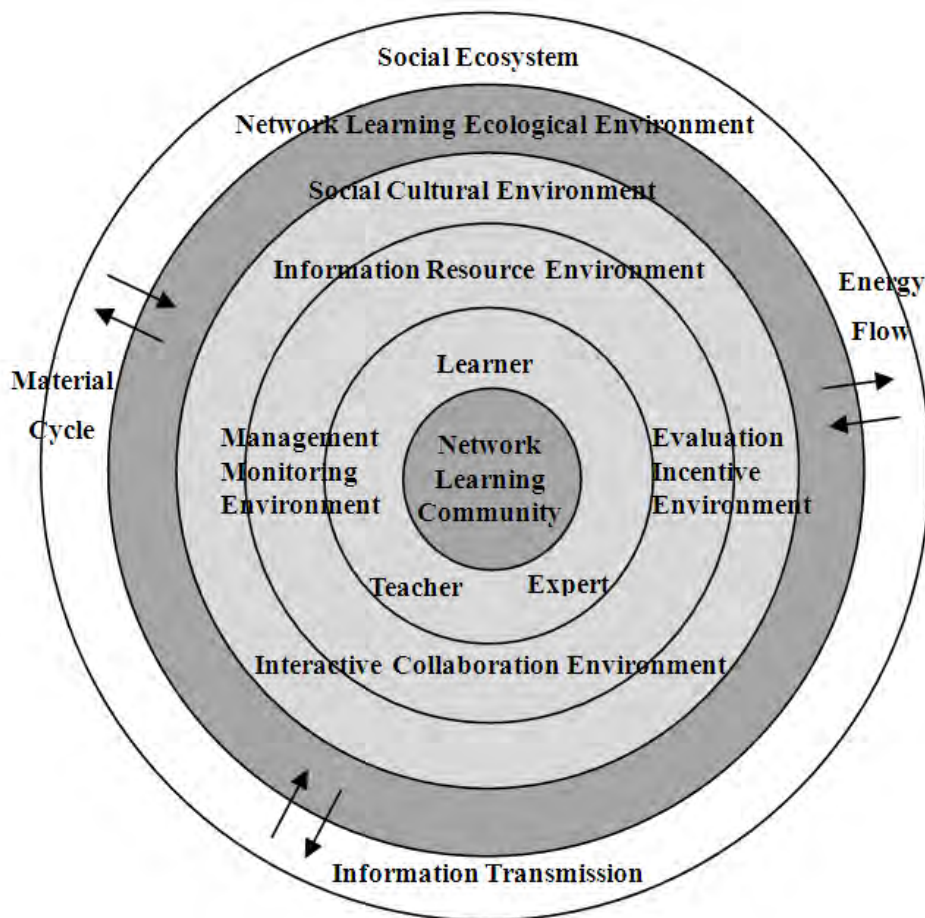The structure of the network learning ecosystem is shown in Figure 1.

Fig. 1, the structure of the network learning ecosystem

The Function of the Network Learning Ecosystem

The organization guarantee group, the conduction development group, and the inheritance development group are the three functional groups of the network learning ecosystem. Through the learning behaviors and learning activities of the three functional groups in the network learning ecosystem, the material circulation, energy flow and information transmission of the network learning ecosystem are promoted.

(1) The material cycle of the network learning ecosystem.

The material flow of the network learning ecosystem is mainly the input and circulation of funds to complete the updating of various material infrastructures and teaching resources in the network learning ecosystem, thus ensuring the normal conduct of network learning activities. The input of funds is mainly derived from the social ecosystem. The material output from the network learning ecosystem to the social ecosystem is manifested in the improvement of learners' professional

knowledge and operational skills, abilities and qualities through network learning, so that learners create more material wealth in their work.

(2) Energy flow of the network learning ecosystem.

There is also an energy flow in the network learning ecosystem, that is, the intelligent flow of network learning resources. In the network learning ecosystem, learning knowledge flows from point to line, from line to face, among network learning participants, and tends to increase in the learning process. The conduction development functional group of the network learning ecosystem continuously develops high-quality learning resources, continuously transforms knowledge, and uses appropriate methods to transmit knowledge information to learners.

(3) Information transmission of the network learning ecosystem.

In the process of network learning, with the support of network technology and learning environment, all knowledge information is transmitted through the computer. The knowledge information transmitted in the network learning ecosystem mainly includes: the teacher's training and teaching information, the student's learning feedback information, the communication and collaboration information between the students, and the knowledge information among the learner, the computer and the network.

Constructing Enterprise Network University Learning Ecosystem

The Composition of the Enterprise Network University Learning Ecosystem

Based on the platform of network university, the company's network university covers the learning environment of all majors, positions and employees in the company system, and establishes an open and shared network university learning ecosystem including knowledge resources and training programs. The composition of the corporate network university learning ecosystem is shown in figure 2.
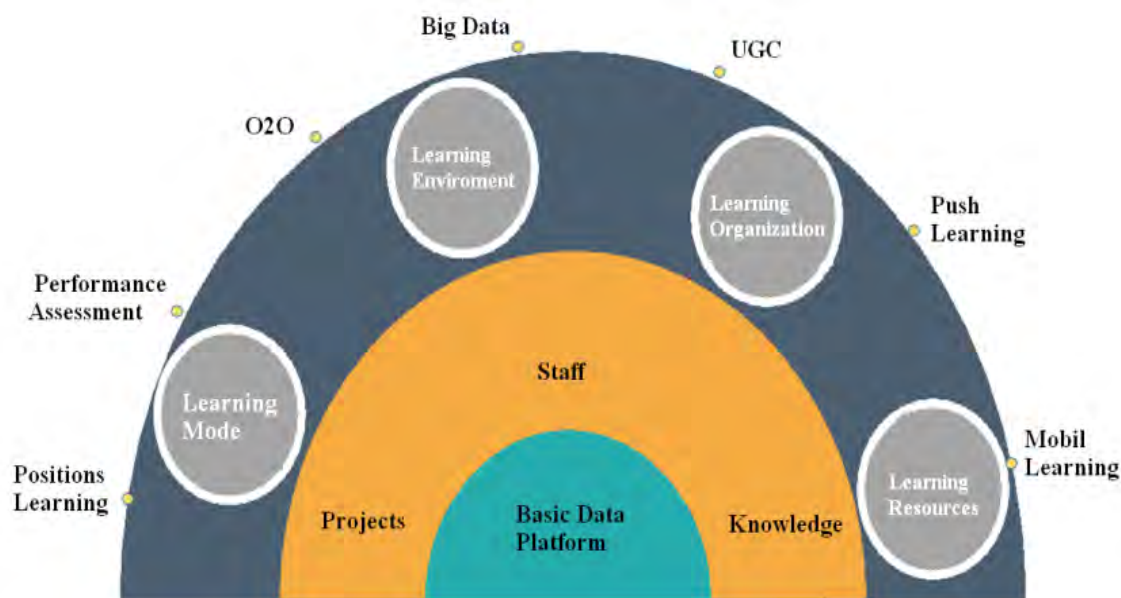

Fig. 2, the composition of the company's network university learning ecosystem

The Balance Mechanism of Learning Ecosystem in Internet Universities

Learning community and learning ecological environment are the two major factors of the network learning system. The balance of the network learning ecosystem means that the internal and external institutions of the entire network learning ecosystem are relatively harmonious and stable. The learning community and the learning ecological environment, as well as the various factors of the learning ecological environment are coordinated, adapted and unified in all aspects. Through the balanced management of learning ecosystem in network universities, the advantage of

the network university training is brought into full play. Relying on the basic platform of network university, the construction quality of the network university resources can be improved, and effective application and optimal management of resources can be promoted.

Establish the Management Mechanism of Network Training Resources Construction Based on Project Management

Training resources construction is a complex and systematic work. In order to improve the management efficiency of the network resource construction projects, the network university application project management of State Grid Corporation has constructed the network training resources construction and management mechanism.

Focusing on the goal of strengthening the construction and management of network training resources, this paper introduces the project management system into the process of network university resource construction innovatively by carefully investigating the demand of network university for resource construction, combing the elements of resource construction, comprehensively analyzing the relationship between the elements of resource construction demand and the elements of staff training expectation, thus constructing a resource construction and management mechanism based on project management, responsibility division, project grading and project process assessment.

The organizational method of project management is applied to the construction of network training resources. By constructing the resource construction and management mechanism based on project management, the training resources can be Shared and utilized rapidly, the construction quality of training resources can be improved, and the effective application and optimization of training resources can be promoted.

Establish a Resource Navigation Mechanism Based on Employee Learning Maps

We established an efficient resource navigation mechanism, optimized resource presentation mode, and formed a resource management mode with post capability classification and learning path linkage. We built a map of employees that covers all core positions. Guided by work tasks, we established typical task competency standards, optimized teaching content and strategies, built employee learning development paths, and developed integrated curriculum systems. The main practices are as follows.

(1) Clarify training needs.

Identify the post "what to do", "how to do it", and "why to build the path map". Firstly, by identifying the gap between current competence level, growth speed and expectations of employees, we measure the impact of the improvement of employees' competence level on performance, and provide quantitative basis for employees' learning and development planning.

(2) Determine the learning content.

Identify the main competency items and competency difficulty levels under the typical task of the post, analyze the post knowledge and skills, determine the learning content, and make the employee learning and work tasks related. Determine "what to learn", that is, accurately define the learning content, so that the students' learning and work tasks are effectively related, ensuring that the job selection is scientific, the typical tasks are representative, the core business processes are accurate and effective, and the best practices are refined and accurate.

(3) Draw a learning path map.

By comprehensive using the teaching design principles, five-star teaching, mixed learning and other teaching design techniques, we can design on-the-job learning, receiving feedback, summing up reflection and self-learning in the learning plan, so as to promote students' active learning and improve the efficiency of learning into behavior, and solve the problem of "how to learn"; at the same time, by drawing the path map, on the one hand, it organically combines the learning task, learning content and learning method with the employee career path, on the other hand, it also forms a visual training kanban management map.

(4) Design and development courses.

According to the knowledge and skills involved in the task, comprehensively use classroom training, network universities, mobile APP, and teachers to design and develop training courses such as courses, cases or operation manuals.

Building an Open Learning Community and Building an Interactive Learning Ecological Environment

The construction of the network university learning community is mainly divided into special areas according to specialties. There are 14 professional classifications and 43 professional areas. There are 60 provincial direct branch classifications, allowing the provincial direct branches to set up special areas in their own exclusive communities. There are 7 special areas, such as network university discussion areas, team leader's ability and quality improvement training area, youth job skills improvement platform area, global energy internet area, learning community administrator area, network university system provincial branch authority administrator, trainer skills competition excellent courseware exhibition evaluation area, and the corresponding activity areas can be added according to various special activities carried out by the network university.

The effective balance and continuous improvement of the open learning community requires a sustainable development ecological environment. The network university has established a point management mechanism based on positive incentives to encourage active participation and sharing. At the same time, in accordance with the principle of "demand driven and activity led", we actively carried out community activities, and gradually transform the "content-oriented" resource-based operation mode of the network universities to the "activity-oriented" operation mode.

The learning community will gradually carry out the expert grabbing mode, encourage experts and scholars to compete with the grassroots stars on the same stage, open up the market of integrals within the community, let the integrals live and flow, promote all participants in the ecosphere to form an effective material flow, energy flow and information flow, and build the community into "power Baidu", the sustainable development of the ecological environment has become an important part of building a balanced ecological learning circle.

The network university enhances the cohesion of the learning community by designing learning communities and planning learning topics. At present, the network university learning forum is becoming more and more active, and the eco-level open learning community with co-creation, symbiosis, sharing and win-win is basically complete. The learning community has become the "most professional, authoritative, timely, and interactive" eco-level learning community that employees are truly "inseparable from".

Summary

With the advent of the era of "all-staff training" in eco-level communities, problems such as the contradiction between work and study of employees can hardly be solved by the traditional face-to-face training, so it is imperative to innovate the training mode of education.

The rapid development of Internet technology has fundamentally changed the way knowledge acquirement.

Under the network training learning environment, "teaching" and "learning" are not limited by time, space and environment. By constructing an enterprise network learning ecosystem, it effectively solves the problems of training standardization, training efficiency and training driving force, innovates knowledge management and training management mode, reduces training costs, and provides support for the company's talent training, strategic publicity, and reform promotion.

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