A Study of the Vocational Teachers’ Knowledge Management Platform

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Abstract
The basis of the research is Ikujiro Nonaka and Hirotaka Takeuchi’s knowledge management theory so as to develop junior high vocational teachers’ knowledge management platform and to provide the practical training community the mechanism for the dialogue space and knowledge sharing. Therefore, it could assist the vocational teachers to make good use of the critical knowledge of teaching, administration, preceptors’ practice and on-the-job learning activities, which is expected to promote the acquirement, application, dissemination and creation of knowledge for the sake of practice teachers’ professional growth. The method of the research adopts systematical research. The researcher deals with the need analysis by the knowledge chain of the practical training community, including the practical guidance professors, practical guidance teachers and practice teachers. The researcher also collects the documents and individual experiences of the practical training community’s critical knowledge, which is built and managed by the platform.

Introduction
The research purpose was to probe into the need for junior high vocational teachers’ knowledge management platform system development; the research method adopts systematic one; the research analyzed the needs for the platform system development by one knowledge chain formed by practical training community, then, proved the need by applying Ikujiro Nonaka and Hirotaka Takeuchi’s knowledge management theory and finally, established the conclusion.

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The check-up standard
The researcher uses Nonaka and Takeuchi’s knowledge management theory as the check-up standard of this research.

1. The models of knowledge conversion’s knowledge is created by socialization, externalization, combination and internalization. Its knowledge is resonance, conception, system and operation.

2. Knowledge spiral means the alternation and results of continuous interaction between tacit and explicit knowledge and knowledge transformation.

The process analysis of the platform system
The structure of the process is as follows:
1. Decide the topic of knowledge chain: Find out the critical knowledge and flow path in the knowledge chain.
2. Draw the process graph of knowledge chain: The purpose is to create the most valuable knowledge, information and data for the practice teachers from the knowledge chain.
3. Draw the internet graph of knowledge chain: Find out the location of knowledge and the people who have the knowledge.
4. Decide the structure of knowledge: The structure is divided into employees, knowledge content and technology.
   a. Employees: The school is the non-profit organization that promotes the teaching quality and innovation mainly, and uses the existed practical community to make teachers cooperate.
   b. Knowledge content: This discusses how to collect, make up, save, send and create knowledge and how to build the common resource categories and knowledge contents to share knowledge.
c. Technology: About the application of information technology, we pay attention to the on-location equipments in school.

**The need for systematic function**

1. Entrance website: The platform is the web interface. The user can access information quickly by the browser. Offer personal entrance website, inclusive of personal workshop, community workshop and knowledge database.
2. Document knowledge database management: Mostly, knowledge is expressed by documents so the document management is the center of knowledge management. This can offer consultant, information, knowledge, discussing single document window with more convenient knowledge sharing environment.
3. Subject knowledge database management: This can offer teachers to collect, save, apply and create knowledge.
4. Building the community: Create and accumulate knowledge organization by the practical community.
5. Sharing knowledge: Offer the operation environment of critical flow path, critical knowledge resource categories, the blank structuralized files of knowledge in each step, practical files and knowledge sharing.
6. Interaction: This is one channel to send information and consult. The members of the community can offer information, share experiences, discuss and communicate with emails.
7. Systematic management: Offer users to access websites and limit the right of released documents. Make proper information security control according to different users.

The research found the knowledge content has 7 categories and four attributes.

**Conclusions**

According to the research result, the researcher offers the conclusions as follows.
1. The result after proving fits in with the theory knowledge spiral and the model of knowledge conversion by Nonaka and Takeuchi’s the knowledge management.
2. The result of the platform need: the need for systematic content has nine flow paths, seven categories and four attributes. The need for systematic function offers seven functions.
3. The concrete structure of the need of junior high vocational teachers’ knowledge management platform is as follows:

**References**