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Mei-Lien Young Nan-Hua University, meilien888@gmail.com

Chun-Chi Chen Shu-Te University, chunchi711215@gmail.com

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A Study of the Changing Process of

Knowledge-Sharing Habits

Mei-Lien Young Dept. Information Management, Nan-Hua University Meilien888@gmail.com Chun-Chi, Chen Dept. of Information Management Shu-Te university chunchi711215@gmail.com

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ABSTRACT

In this research, we explore the impacts encountered by teachers with respect to sharing their teaching material and knowledge as a college implements the "Faculty-Student Knowledge Sharing Platform (FSKSP)." In addition, we report the experience and progress they acquire when choosing to change their traditional, habitual teaching and sharing modes. The case study focuses on a college of technology well-renowned among universities in Taiwan for its total and integral electronization of teaching. The study shows that sharing knowledge with students through the FSKSP is very different in nature from the long-established verbal knowledge sharing in classroom lectures. In choosing to use the FSKSP and making changes to the interaction between faculty and students, the teachers go through the stages of: Protection of professional dignity and expertise, panic with regard to whether or not to make changes, compromise with respect to the trends in information technology, and hesitation about whether to march forward or turn back. The research findings serve as a good reference for college administrators as they advocate the introduction of information technology to construct the FSKSP.

Keywords

knowledge management, cultural habits, knowledge sharing, knowledge-sharing platform, narrative interview, Phenomenological Research Method

INTRODUCTION

In this era of knowledge economy, one of the most important information strategies launched by the Taiwanese government has been to increase national competitiveness by knowledge creation and distribution with the aid of information technology (IT). As institutions of knowledge incubate, tertiary schools are promoting e-learning, constructing faculty-student knowledge sharing platforms (FSKSP), so that teaching is no longer confined to the classrooms and blackboards, and learning is not limited by time and space. These have been the goals of many colleges in their determination to create and distribute knowledge. However, major changes in teaching design and teaching habits are required, making the planning and promotion of related measures rather complicated.

In this research, we observe the use of FSKSP in a college of technology well-noted among colleges and universities in Taiwan for its total and integral electronization. We find that teachers are not as enthusiastic as expected in using the platform for the purpose of knowledge delivery. Through examination of the knowledge management (KM) literature, we find that enterprises and institutions have devoted considerable effort, including investment in knowledge management systems (KMS), to carry out to the fullest their strategies to create and share knowledge. However, the results of the efforts have failed to live up to expectations, with many KMSs becoming "expensive and useless information junkyards" or "empty libraries" that very few people, if any, use McDermott 1999, 2002.

Many researchers of KM have discussed and pointed out obstacles in implementing KM activities from different perspectives. For example: poor access to input and distribution, inexperience in using the IT (Rivkin 2000), lack of absorptive or retentive capacity (Cohen and Levinthal 1990; Szulanski 1996), and desire to preserve scarcity and tap monopoly rents (Winter 1995). Yet, among these barriers, the greatest difficulty lies in peoples' habits that are molded under specific culture (Michailova and Husted 2003; Detert and Edmondson 2007). McDermott (1999 also considers the working habits developed in the context of specific culture to be the greatest challenge in knowledge management. Therefore, cultural habits are crucial to the realization of delivery and the sharing of knowledge.

Indeed, cultural habits have become fixed through the activities conducted by group members under a specific network over a long period of time. It is an artificial object in life. Durkheim (1911) argues that most people live under the cultural force and yoke of habit. When things happen repetitively in the same manner, habitual behavior naturally occurs. Certain different functions respond, repeat naturally and mutually into habits. Durkheim further points out that once

habits are endowed with power, they become the rules of conduct, and as a consequence, may become the greatest obstacles to progress. Take, for example, old-fashioned corporal punishment, constantly present under the influence of the power of habit. Weber (1922) assets that uniform behaviors of a group are rooted in habits, and habits are a tendency to allow actions that are unreflective and subjective to turn into long-term behaviors. Therefore, the usage and relation modes among modern economic factors are all subject to habits, and work itself depends heavily on the foundation of habits. Habits not only prompt people's behavior to conform to the rules, they are also the source of rules. This means that personal behavioral habits developed from pure, psychological inclinations are advanced into a kind of binding experience. Although habitual behaviors do not occur randomly and an individual sometimes conducts his behavior beyond his habits, we can be sure that there is a strong relationship between life and group habits in different social groups (Camic 1986). From the discourses of Durkheim and Weber, we know that habits are not a complete set of properties; they have been molded by an individual in different social groups through social practice (Camic 1986).

In light of this, it is very important to explore the experience of teachers when they use a knowledge management system (KMS) to comprehend the networks behind sharing phenomenon, and further explore how teachers, under the traditional long-established sharing network of teaching, face the process of change triggered by the installation of knowledge-sharing platforms, as well as the dilemmas and successful experience behind the process. The findings of this research will serve as a good source of reference for knowledge management administrators in colleges when they implement IT as a faculty-student knowledge-sharing platform. This will enable teachers to retain their authority while they enhance their teaching and learning efficiency with the help of information technological applications.

CULTURAL HABIT AND KNOWLEDGE DISTRIBUTION IN THE UNIVERSITY DOMAIN

The culture creates patterns of behavior for the different roles and the roles lay down the bases for the habits that determine individuals' lives. Thus, habits are predisposing tendencies to meet certain situations in certain ways in accordance with the roles that are operative in certain situation (Bloch 1943). Therefore, cultural habit is a culturally-fixed mode; it is also an artificial object in life. Durkheim (1911) indicates that most people live under the force and yoke of cultural habit. He continues that rules of conduct are produced under the force of cultural habits, which can become the greatest obstacles to progress. For example, a social phenomenon like old-fashioned corporal punishment constantly exists under the influence of the force of cultural habits. Weber (1922) points out that the same behavior in a group is a habit that originates from the culture of the society it comes from. Camic (1986) also indicates that an individual can sometimes conduct behaviors that go beyond cultural habits. What is clear is that there exists a strong relationship between an individual's life and the cultural habits of a group, and this holds true in different social groups. According to scholarly discourse, we can learn that cultural habits are not a plethora of properties; they are rather molded by individuals in different social groups through social practice (Camic 1986).

Universities are the best places for the production and delivery of knowledge, and college teachers are the promoters of the production and delivery of knowledge. College teachers explore and create knowledge through academic research activities, and share this with students through teaching activities, achieving the purpose of knowledge delivery. The exploration of knowledge, however, is an important channel through which college teachers accumulate their personal intellectual assets. Through research activities and academic presentations, they show their status in their professional field. These knowledge assets are also important elements of college teachers' personal teaching activities.

Most traditional teaching activities often take place in the classroom, and the medium of knowledge delivery often includes textbooks, handouts and blackboards, etc., with teaching content always being delivered verbally. The range of knowledge delivery is confined to the actual classroom space, and the recipients of knowledge are the students in the classroom. When IT platforms are introduced into activities of knowledge delivery and sharing, the medium, methods and the range of knowledge delivery also change. In particular, the recipients of knowledge change from the limited number of students to all possible readers that come and go on the technology platforms. Therefore, using the technology platform as a new medium leads to considerable clashes in terms of the knowledge delivery and sharing methods of college teachers' consciousness as well as habits with respect to knowledge assets. In view of this, it is necessary to understand the process of the change of college teachers' cultural habits when they are faced with the challenge of embracing IT.

RESEARCH DESIGN

Research Methodology

Phenomenological Research Method is the most appropriate way to study personal life experience (Lowenberg and Washington 1993). It allows us to impose structural analysis on the most ordinary, the most familiar, and the most self-evident incidents. The purpose is to construct a vivid description of the actions, behaviors, will, experience, etc., that are encountered in human lives (Van Manen 1990). For this reason, the present study adopts the Phenomenological Research Method to systematically describe the life and world surrounding the teachers and their lived experience of using the "faculty-student knowledge sharing platform."

We collect data through narrative interviews, a method of information collection in social sciences done through the narrating process of the participants which permits deep exploration of the individual's world of experience (White 1980).

Unlike other methods, a narrative interview allows participants of the research to talk about their own life experience in the form of impromptu narration. Participants do not need to make any prior preparation. The beginning of an interview is conducted by asking short questions guided by specific situations. After that, the participants decide on the content and the speaking style by themselves and the interview continues. In the narrating process, the researchers do not put any limit on the directions and the content of the speech. Josseloson (1995) maintains that narration is the representation of a process, a presentation of a dialogue between one and oneself, as well as between oneself and the world. Therefore, the narration does not represent how facts should be recorded or the truthfulness of events, but records within a system of meaning the complicated thinking and experience of a lifetime.

The Case

The education system in Taiwan is comprised of basic education, intermediate education, advanced education and returning education. Th basic education includes kindergartens, national primary and national middle schools. Intermediate education includes vocational schools and senior high schools. Advanced education includes junior colleges, universities and graduate schools. The case in this study is a college of technology, well-noted among all the colleges in Taiwan for its IT-oriented campuses and total, integral electronization. The "Faculty-Student Knowledge Sharing Platform (FSKSP)" is a digital space exclusively for interaction between faculty and students. The FSKSP service for teaching became available in 2004, and was set up with Share Point software launched by Microsoft. Major functions of the platform include: sharing of documents, contact information of both faculty and students, discussion area for faculty and students, and the teacher's personal teaching resources, etc. Each of the 260 full-time teachers in the college has his/her own exclusive interactive teaching environment. The teachers can create and alter their web-page design, upload and include supplementary material for courses; they can announce real-time messages from their teachers, and ask questions regarding courses, etc. The major purpose of the installation of the platform is to create another interactive venue outside the class for the faculty and students that is not be limited by time and place. There are all together 133 teachers who are currently using the platform online, the percentage of usage being approximately 51%.

Sampling and Procedures

After observing the uses of each faculty member on the FSKSP, we invited the faculty members from different professional fields. Invitations were extended in the form of e-mails. Using the snowballing method, we continued to invite teachers who were recommended or simply mentioned by participating teachers. In the end, a total of 16 college faculty members participated in this research. The interview period lasted for four months.

The narrative interviews began with several properly-defined questions. For example, "Could you please talk about your experience of using the FSKSP?" "What do you think about using the FSKSP?" As the interviews progressed, we responded with "For example?", or "What do you mean by that?" The interviews were recorded by a multifunction digital recorder, and were transcribed verbatim immediately after each interview, so as to discover new narrative experience phenomena or missing links in the questions we posed. This enabled us not only to include the new findings in the interviews we conducted with other participants, but also to raise them the second time we interviewed the interviewee. With repetitive interviews, we hoped to achieve the desired degree of saturation and completeness in the information provided by the cases studied and between cases for the purpose of information analysis (Agar 1986).

Data Analysis

With the Phenomenological Research Method, the purpose of information analysis lies in the systematic organization of the contents of the interview, which allows the cause and effects of incidents, the social norms and social values hidden beneath the cultural behaviors to be made plain through the narration of the participants (Rubin and Rubin 1995). To reduce the bias in information analysis, we complimented this method with the information acquired through our observation of the FSKSP when conducting information analysis (Mitchell 1986). First of all, we repeatedly read the text of the interview and immersed ourselves in the text in order to construct and interpret the orienting gestalt of the lived experience of the teachers when using the platform. This was used as the coding basis in other stages of information analysis (Barritt et al. 1983; Van Manen 1984). In this stage, we pointed out the essential characteristics in the text of each interview participant and deleted words not related to the themes or words that were idiosyncratic (Kockelmans 1975).

We then pointed out the meaning units in the narrative text related to the research topic while adding specific labels to the specific unit (Barritt et al. 1983; Van Manen 1984).

Next, we put together similar concepts into a theme and named the theme through repetitive questioning: "Does the title of the theme bind together similar concepts?" If it did not, we stepped back and examined the themes to see what, if anything, bound them together.

When the coding was completed, we compared with Taiwanese professors what different people had said, what themes were discussed, and how concepts could be understood from the context of culture. Finally, we constructed a

textual-structural description of the meanings and essences of informants' experiences (Kahn 1993; Sandelowski 1993, 1994; Moustakas 1994).

FINDINGS

Dignity in Expertise

"Teaching is an expertise. Teachers should be knowledgeable, excellent in intelligence and know everything." These are the conceptions that people in modern society generally have of teachers. Teaching has been a respected profession; hence, facing external pressures, teachers tended to feel "why should we follow your code?":

The school KM administrators sent student workers to "teach" teachers to learn how to work on the sharing platform [FSKSP]. They should refrain from the word "teach," but rather, "assist" the teachers to establish it. When they use the word "teach," I am a professor, if people hear that I have to be taught, then I am done with teaching!

Teachers are quite used to the idea that being a teacher means they should "be able to do everything". Moreover, college teachers enjoy hyper-autonomous status; they do not allow other people to interfere with their mode of teaching. The dominating concept on college campuses is for the professors to rule the school, and such a concept endows college teachers with hyper-level autonomy.

Teachers serve as an important bridge in the sharing and delivery of knowledge, while IT, on the other hand, is the symbol of progress. IT is regarded as an aid for the teachers to share their knowledge. However, teachers are not of the same opinion when they conduct the sharing of knowledge with IT:

I can teach with this [FSKSP]. I can still teach without this [FSKSP]. Frankly speaking, there is not much difference with or without it. ... If I can use other mechanisms to guarantee my teaching qualities, do I have to use this platform [FSKSP]?

The confidence teachers have in their own teaching methods makes them unwilling to change the existing teaching methods they have been used to.

The Fear of Making Changes and Not Making Changes

The increase and delivery of knowledge gets speedier everyday. Teachers are becoming aware of the fact that students are doing better than the teachers themselves in some ways; students have a considerable amount of knowledge already.

In the past, the teachers always knew more than his students But it is different now. Do you think students are always under the teachers? It is not necessarily so! Teachers are probably superior in some theories, but they may be inferior when it comes to the operation parts.

If a teacher can neither make progress in his traditional teaching methods, nor enhance his own position of superiority with digitalized teaching materials, would it lead to their being unable to teach the students anything? Teachers are starting to worry that they themselves might lose the core value of being teachers.

If a teacher can teach very well with the traditional method, then they will continue to survive; if they cannot teach well with the traditional method, and cannot make digital teaching material either, then they have nothing left but a mouth!

Yet, for teachers, knowledge is their most important asset. If they put it on the Internet, and make their knowledge easily accessible, then what is their professional value? Exploration of knowledge is an important way for teachers to accumulate their assets, in an environment like the academic world; teachers consider it necessary to protect what belongs to them, because they lose their value without their unique knowledge:

Teachers certainly don't want others to get their material easily. We all hope to get other people's information easily, but we don't want others to get our information. This is human nature. In the academic environment, one tends to feel that our knowledge is our asset. In the academic world, basically, I think teachers are rather stingy.

The teaching materials that I have been collecting and accumulating over the years are ready for publishing in a book. However, if someone pulls a fast one on me and publishes it, I could not possibly prove it is mine.

Once a person's own knowledge assets are made public on the Internet, the teachers are afraid and have concerns that the knowledge they have striven so hard to accumulate will be stolen by others and lose its value. Furthermore, in the traditional teaching method, the counter parties are students only, and the compass is limited within the classrooms, the teachers do not have to worry about their violating other people's intellectual property rights. Yet, when the teaching material is placed on the Internet, not only can students see it, but the range is no longer confined to classrooms, and the teachers begin to consider the problem of copyright infringement:

I hide nothing when I teach my own students. But I don't want all the people in this country to retrieve my professional knowledge from the platform and go!

Teachers worry that their own knowledge will be taken; they worry about violating other people's knowledge assets as well:

Sometimes for the sake of teaching, we will download some commercials, videos or other people's articles. There is no question of copyright when I play them in the class, because it may last only 3-5 minutes and there will not be any record left. I do not have to worry about playing the class materials I download from the Internet. However, if I put them on the sharing platform, it should be a concern. This is what worries me.

Compromise to IT Trend

Teachers struggle between the role given to them by society, that is, "I am a teacher" and the concern in their heart that says, "I will not be eradicated." They persuade themselves to try the new ways and change the sharing modes that they have been used to for so long.

You might have been able to use some material for ten years in the past, but not now. Without further learning, things can no longer be used after one or two years. Can a teacher teach students with what he learned on the doctoral program until his retirement? It is just not possible.

Teachers may also feel that they have insufficient knowledge, and progress must be made in this respect. Being a teacher, the only option is to continue to learn.

We can continue to learn through reading, ...we have doctoral degrees, we are teachers, and cannot choose but to learn!

As there are now many channels through which the students can acquire knowledge, teachers can no longer rely on invariable content alone. Teachers have to learn new knowledge and blend in updated and everyday reality so as to make the content of the teaching extend the students' current knowledge.

The era of electronization has arrived, ... without comprehension and proficiency, it is like breaking a connection in this era. It is almost as if you cannot go out of the door, and there is no way you can interact with other people.

They feel electronization is the trend, and as teachers, they are not allowed to fall behind the times.

It's impossible to resist the trend! There is no chance for rebuff, either. Because with the coming of the digital era, one cannot possibly teach a class with one's mouth and blackboard writing only! It will be very hard for the students to look up to you. In the past when there were no Internet and computer technology, a teacher could but teach by lecture, blackboard writing, textbooks, and carrying a chart or a graph with him/her at most, Teachers need to transform Internet information and digital information into applicable teaching materials.

The students are going to criticise you if you are still using black-and-white posters. There is nothing you can do but to make changes. Information technology is advancing; the schools are also changing.

With the changes in the teaching environment, a teacher can no longer depend on just blackboard writing, textbooks and a voice. It seems that only by casting away the old habitual teaching methods and learning to use the new teaching assisting tools can teachers make students appreciate their efforts.

Going Forward or Going Back

After hesitation, teachers begin to feel that the use of the FSKSP could be helpful to teaching, and so start to change the sharing modes they have been using for so long. They tend to think that they should use the platform if they want to be "good teachers."

If you would like to be a good teacher, then of course, this platform offers itself as something that you can do now, but could not do before.

The distance between the teachers and students is shortened after using the platform:

Students are more outspoken on the platform compared with in the classroom. There is a great difference! I am more like a friend on FSKSP, yet, in the class, I am a teacher! The distance with the students is lessened.

The feedback from students is the best encouragement for teachers. The more enthusiastic students' responses are, the more teachers want to try to improve their teaching.

Now when they (students) notice what I post and changed on my webpage on FSKSP they would say, "Wow, you make the changes to the setting of the webpage!" I find that students visit my webpage and read what I share on FSKSP. I will do my best to maintain my webpage, constantly updating it so that it can be more plentiful and enriched.

Some of the teachers, however, after using the platform, find that they simply cannot make the changes, so they choose to go back to the old sharing modes in teaching with which they have been familiar for so long:

Its effects are really not so good. So if I were to choose, I would choose not to use it. I have been using it for more than two semesters. And if I can choose in the next semester, I will be more inclined not to use it.

After the teachers use the FSKSP for a period of time, they regard the making of teaching material as time-consuming. They feel that students do not even use the platform, and do not know how to respond, and so the effects are not as good as expected. All of these factors lead the teachers to choose to abandon the changes and return to the old teaching methods:

The ways of preparing teaching material are different. In the past, I simply made copies for students; now everything has to be made into digital files. The time spent is more than two or three times the way it was. The cost is much too high!

When I found out that my students did not use the platform often, I began to feel this was a waste of time. It made you feel, "who am I making all these for?"

Teachers spend a lot of time on preparation, hoping that the students will improve and obtain knowledge through this effort. However, when they discover that the students do not even read the material, the feeling of loss prompts their decision to discontinue. In addition, students do not respond to the platform, it being only the teachers who upload material with no feedback or reward of any sort. As there is no way of knowing how students are using the platform, teachers' reluctance to use it increases.

I thought it was right; students could read the materials I put on the platform at any time. But this was not the case. Students stopped coming to the class, they could simply download from the platform as everything was there. Students skipped classes without feeling guilty.

The FSKSP brings convenience for students as well as negative impacts for teachers. Students begin to skip classes, they refrain from taking notes in the class, and stop buying books, because "everything is on the Internet." This is also one of the reasons for teachers' decision to abandon the platform and return to the old teaching methods.

CONCLUSION AND DISCUSIONS

Considerable problems arise when a familiar and well-tried and tested teaching design is changed, through the scheme of a FSKSP, to one that is utterly different. The elevated status of college teachers in their professional fields has endowed them with excellent qualities and confidence in their own teaching methods. However, with the arrival of IT, loaded with the symbols of "efficiency," "modernity," and "strength," and complimented by all kinds of commercial publishing, professional discussion groups and the grapevine of personal Internet networks, the notion that the "solution is in the IT" has taken root in our system of thinking and ideology. As a consequence, college teachers have been forced to make adjustments to their teaching mode in response to the changes. Such adjustment has been made through a process characterized by conflict and tension between the professional values of college teachers, the threats to professional and economic value of knowledge assets, concerns over protecting personal intellectual property and infringement. Therefore, when colleges introduce KMS into teaching activities as a faculty-student interactive medium, it is vital that they take into account the dilemmas and contradictions faced by the teachers and help them to make the necessary changes.

Furthermore, the negative impacts on the students of the launch of FSKSP are very important issues in management and research. One example of such an impact is the students' loss of opportunity to obtain the tacit knowledge that is communicated through mentoring. Others are the loss of physical interaction with classmates, and the impact on knowledge production and knowledge economy when students refrain from buying textbooks. Our research findings have important managerial implications for KM administrators when implementing the IT to construct the faculty-student knowledge sharing platform. Our study suggests that authority should remain with the teachers while they enhance their teaching and learning efficiency with the help of information technological applications.

In addition, in terms of theoretical implications, our findings highlight the importance of cultural habits in explaining KMS usage behavior. The notion of habit has been introduced into IS usage research and has been reported as having explanatory power for predicting an individual's IS behavior (Limayem and Hirt 2003; Kim and Malhotra 2005; Limayem et al. 2007). Among these studies, the term habits refers to the automatic enactment tendencies developed during the past

history of the individual, such that particular stimuli bring out the behavior even when the individual does not instruct himself/herself to perform it (Thorngate 1976; Triandis 1977, 1980). In contrast, in our study, it is emphasized that habit is a culturally-fixed mode that drives an individual's social practices in a group and in the particular context. To interpret an individual's IS usage behavior, it is necessary to understand the cultural habits of the group to which the individual belongs. Our study represents an initial step toward introducing the idea of cultural habit into IS (FSKSP) usage research.

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