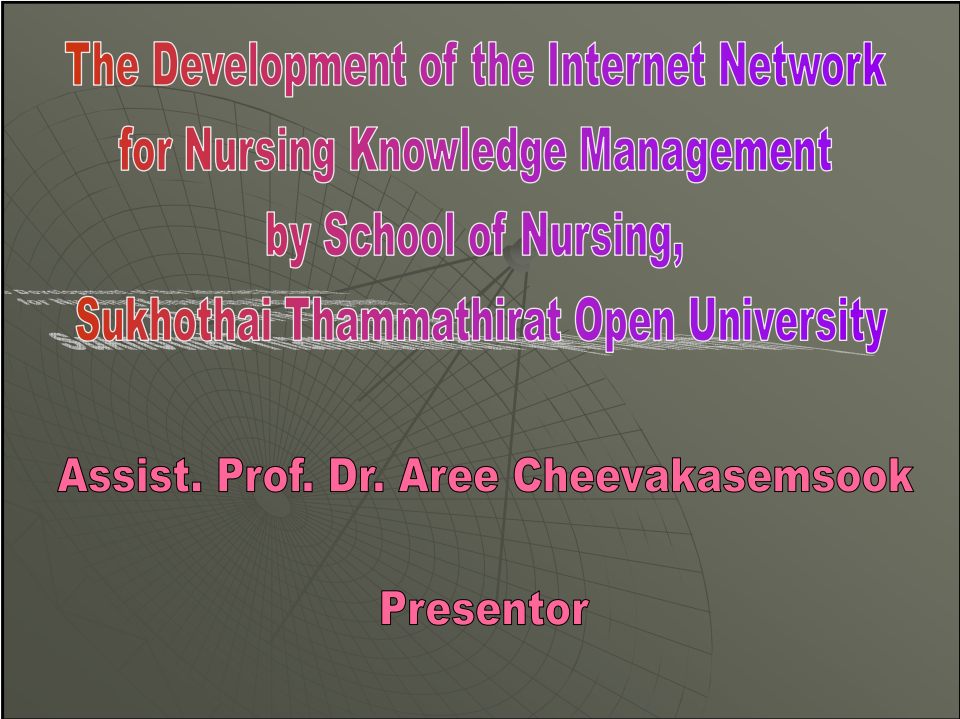




**The Development of the Internet Network
for Nursing Knowledge Management
by School of Nursing,
Sukhothai Thammathirat Open University**

**Assoc. Prof. Boontip Siritarungsri
Prof. Karen Francis
Assist. Prof. Dr. Aree Cheevakasemsook
Assoc. Prof. Dr. Somjai Putapitukpol
Assoc. Prof. Dr. Srinual Sathidvithayanun
Sasithorn Sainapa**



**The Development of the Internet Network
for Nursing Knowledge Management
by School of Nursing,
Sukhothai Thammathirat Open University**

Assist. Prof. Dr. Aree Cheevakasemsook

Presentor

Background



- Knowledge is power, and it is the tool for personnel working in every organization
- Knowledge management (KM) is the collection of processes that involves the creation, dissemination, and utilization of knowledge (Newman 1991)
- The purposes of KM are to develop tasks, personnel, and organization
- KM process comprises 4 steps: knowledge creation, knowledge codification, knowledge transfer, and knowledge application (Gover 2001; Nonaka 2004)

Background (cont.)

- KM affects innovations, effectiveness, and continuous improvement in organizations
- Knowledge management has been applied in knowledge for nurses but still requires effective managing knowledge for nurses
- The policy of Sukhothai Thammathirat Open University requires “learning organization”



School of Nursing responses this policy by undertaking the research to the internet network for nursing knowledge management...the innovation for Thai nurses to learn how to create the network of knowledge management

Research objectives

1. To develop the Internet network for nursing knowledge management
2. To evaluate the Internet network for nursing knowledge management in terms of **both satisfaction & advantages of the users and the netters on the internet network**

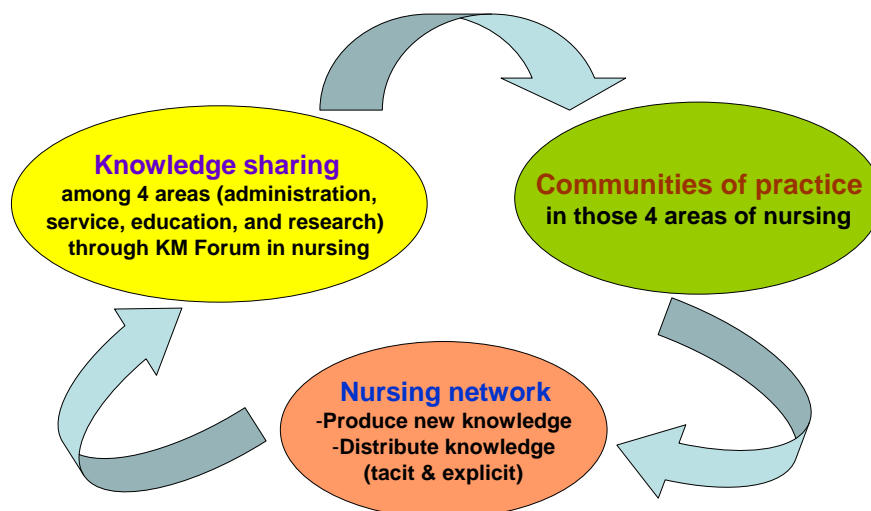
Research Methodology

- Research and Development approach
- Population 3 groups:
 1. Establishers....169 nurses participated in the workshop entitled “E-learning: Developing nursing knowledge management and develop the internet network”
 2. Users: 216 nurses including establishers, members, and interested persons participated in using the Internet network during the pilot stage
 3. Netters: 516 nurses involved the internet network after the network was developed

Research tools

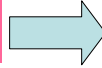
1. The Homepage called “*KM Forum in Nursing*” was used for developing nursing knowledge management
2. Questionnaires were used for evaluating the network of nursing knowledge management regarding satisfaction and advantages on the “*KM Forum in Nursing*” (the internet network)

Conceptual model of the development of the internet network of nursing knowledge management



Research procedures

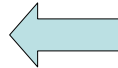
Internet Network preparation



Develop the internet network, do pilot study & evaluate its effects I , and refine



Evaluate the effects II and do the report



implement the network

Research procedures (cont.)

Internet Network preparation

- Divide into 4 groups (education, management, service, and research)
- Discuss



Develop internet network

- Use data from the preparation and literature to establish the the internet network through the KM Forum homepage
- Seek members (216 users)
- Do pilot study and evaluate its effects I (satisfaction & advantages)
- Refine the homepage



Evaluate and report

- Evaluate its effects II (satisfaction and advantages)
- Do the report



Apply the network

- Encourage the participation of the members by updating the information and setting the issues

Data analysis

- Quantitative data (satisfaction and advantages on the internet network) were analyzed by percentage, mean, and standard deviation
- Qualitative data (from discussion and feedback)... were done by content analysis

Findings

- The Homepage of nursing knowledge management could be used as the Internet network for knowledge management
- Evaluation of the internet network
 - 1) First evaluation: 216 users rated their satisfaction and advantages on the “*KM Forum in Nursing Homepage*” at the high level.
 - 2) Second evaluation: 516 netters also rated their satisfaction and advantages on the the homepage at the high level

http://www.stou.ac.th/schools/home/ - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.stou.ac.th/schools/home/

KM Forum in Nursing Homepage

STOU Home | Home Page | STOU Home | Home Page | STOU Home | Home Page

STOU มสธ.
Sukhothai Thammathirat Open University


Home Page
สาขาวิชาพยาบาลศาสตร์
School of Nursing

Administrator

ข่าวกิจกรรมการศึกษาศึกษา:

15.15 - 16.00 น.

2. รายการของมหาวิทยาลัยต่างของมีระบบ ออกอากาศ
พร้อม Web Casting (click ที่ Live Board Webcasting
บนโฮมเพจของ มสธ. www.stou.ac.th) ทุกวันจันทร์ เวลา
11.00 - 12.00 น.



Click on

[แนะนำตัวเรา](#)

[กระดานสนทนาพยาบาลศาสตร์](#)

[บริการพยาบาล](#)

[KM Forum in Nursing](#)

กิจกรรมการบริการก่อน

นักศึกษาที่ลงทะเบียนเรียนในภาคการศึกษาที่ 1/2552 สามารถดาวน์โหลดแฟ้มข้อมูลฝึกปฏิบัติการพยาบาล (สำหรับนักศึกษาพยาบาลศาสตร์) และแผนผังการบริการศึกษา (สำหรับนักศึกษาพยาบาลทุกภาควิชา) ได้ที่นี้:

- [แฟ้มข้อมูลพยาบาลสมัครฝึกปฏิบัติ \(ปีเรียน 2 ปี\)](#)
- [แฟ้มข้อมูลพยาบาลสมัครรวมกับฝึกปฏิบัติ แผนผังการบริการการพยาบาล](#)

กระดานสนทนา มสธ. :: STOU Message Boards - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.stou.ac.th/forum/display_forum_topics.asp?forumID=17

กระดานสนทนา มสธ. STOU Message Boards

มหาวิทยาลัยสุโขทัยธรรมมาธิราช
Sukhothai Thammathirat Open University

ค้นหา

Names of questions, issues

Questions, issues, etc

Reply

ID	ชื่อกระทู้	ผู้โพสกระทู้	คน	อ่าน	ผู้ตอบล่าสุด
25896	เป็นเอกอภยวจนที่ขอเข้าพบผู้ช่วย	บ๊อบ	0	14	บ๊อบ IP Address: 61.91.73.21 4 ตุลาคม 2552 เวลา 23:35
25611	ป.ใบประกอบ 02554	athens	0	22	athens IP Address: 118.172.231.200 1 ตุลาคม 2552 เวลา 12:18
25200	เป็นเอกอภยวจนที่ขอเข้าพบผู้ช่วย	loulek	1	40	warnote IP Address: 124.157.154.131 29 กันยายน 2552 เวลา 14:24
24600	ขอแลกเปลี่ยน	Bossjai	1	72	warnote IP Address: 125.25.122.185 29 กันยายน 2552 เวลา 14:29
24547	จัดตั้งชมรมนักศึกษาพยาบาลศาสตร์	253000	1	38	warnote IP Address: 58.8.83.214 29 กันยายน 2552 เวลา 14:30
23647	ขอแลกเปลี่ยนข้อมูลความรู้	srjs	1	111	warnote IP Address: 118.172.130.5 29 กันยายน 2552 เวลา 14:33
23100	ขอแลกเปลี่ยนข้อมูลความรู้	tbody	1	75	warnote IP Address: 61.7.149.95 29 กันยายน 2552 เวลา 14:42

First Evaluation (After Pilot Study)

- 1. Demographical data of the users**
- 2. Satisfaction on “the KM Forum in Nursing Homepage”,**
- 3. Advantages on the homepage”**

First evaluation from pilot study

- Most of the users were women, 40- 45 yrs., in Bangkok and central region, bachelor degree, and in service sector but interested in management knowledge.**
- Participation: Mostly 1-2 times a week, last 30 to 120 minute, and searched for information and knowledge**

First evaluation from pilot study (cont.)

- **Satisfaction:** The homepage style (teamwork, members, and knowledge storage), main menus, content (knowledge storage from a variety of sources).....the high level.
- **Advantages:** At the high level repectively regarding knowledge storage, teamwork biography, nursing knowledge exchange, and members information. In the whole view, the users obtained new knowledge (91%), task development (81.7%), and be the knowledge resources (71.7%)



The satisfaction and advantages on the homepage, and the users' feedback

-Modify the homepage style and content as suggested by the users,
-Change the researchers' roles to become the facilitators for enhancing knowledge management e.g. add on members' expertise, collect knowledge, etc.

Second Evaluation (After implementation)

1. Demographical data
2. Satisfaction and advantages on "the KM Forum in Nursing homepage",
3. Issues from sharing knowledge

Demographic Data of the Netters

- Sex: **Female**: Male (97.3%: 2.7%)
- Age: Mostly **41- 45 yrs**
- Address: **Bangkok 30.4%**, central region 27.7%, north-eastern region 17%
- Income: Mostly **20,001-30,000 Bahts** (36.6%)
- Education: **Master 55.4%**, Bachelor 40.6%
- Position: **RN 47.3%**
- Study status: **Master 37.5%**,

Demographic Data of the Netters(cont.)

- Internet knowledge and experience: **Moderate 64.3%**
- Location of using internet: **Workplace 93.8%**
- Area of interest: **Research 88%, service 84%, management 73%, education 67%**
- The frequency to access the homepage **Mostly 1-2 times/week**
- Duration: **Mostly 31-59 minutes**
- Activity during accessing the homepage: **Seeking information & knowledge**

Satisfaction on the Homepage

Items	Level	Mean	S.D.
1. Location and interest of the homepage	High	4.00	1.09
2. The size of letters and colors	High	3.99	1.10
3. Presentation of each part	High	3.99	1.13

Advantages on the Homepage

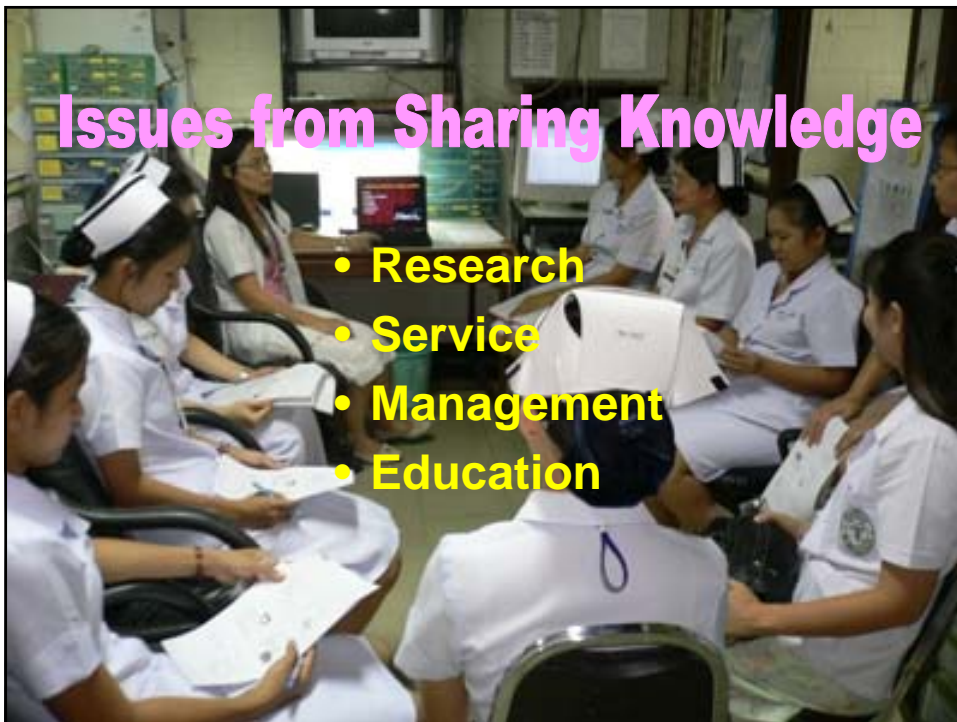
Items	Level	Mean	S.D.
1. Obtain new knowledge	High	4.14	2.81
2. Obtain knowledge and information	High	4.43	3.08
3. Exchange knowledge	Moderate	3.49	3.70
4. Be resources for searching & researching	Moderate	3.28	3.63
5. Be information resource for referencing	High	4.43	3.98

Advantages on the Homepage (cont.)

Items	Level	Mean	S.D.
6. Be useful for task development	Moderate	3.00	3.48
7. Be advantageous for daily living	Moderate	3.07	3.87
8. Be information resource or network of nurses	Moderate	3.07	3.52
9. Apply knowledge to any situations	High	4.43	3.98

Second Evaluation

Satisfaction and advantages on the homepage at the high level



Issues from Sharing Knowledge (cont.)

- **Research..**
 1. **Require qualitative research**
 2. **Research on diabetes patients**
 3. **Research on pain**

Ex: Nursing care in the future needs more understanding patients. Then, qualitative research is as necessary as quantitative approach

Issues from Sharing Knowledge (cont.)

- **Service....**
 1. **Nursing documentation**
 2. **Discharge planning**
 3. **Practice guidelines**

Ex: Doctors complaint that nursing records are not useful for their works due to lack of few clinical data

Issues from Sharing Knowledge (cont.)

- Management....
 1. Nursing competencies
 2. Patient rights
 3. Preparation to become a manager

Ex: How to develop nurses' competencies?

Issues from Sharing Knowledge (cont.)

- Education....
 1. Knowledge management
 2. Continuing education
 3. The development of online articles

Ex: How to begin knowledge management?

Conclusion

The homepage of nursing knowledge management could be used as the Internet network for knowledge management with high satisfaction and advantages perceived by both the users and the netters

Recommendation

Moderate advantages

- Exchange knowledge
- Be resources for searching and researching
- Be useful for task development
- Be advantageous for task development
- Be information resources or network for nurses

Need more improvement for better benefits such as strengthen the content, add more information, etc.

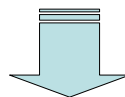
Recommendation (cont.)

- The users registered as members of the network assessed the “*KM Forum in Nursing Homepage*” for searching information and knowledge rather than sharing, building up, or constructing new ones (which were the objectives of knowledge management).....**this reflects learning and teaching of nursing or training nursing personnel to develop their knowledge management skills in terms of knowledge management process, building up knowledge, and constructing new knowledge**

Lesson learned....



The homepage of this study failed after finishing this study and could not restore it



The technological infrastructure should be well developed and protected (in case some technical problems occur anytime) to assure the homepage exists as long as required



Thank you!

Questioning?