

KNOWLEDGE MANAGEMENT IN THE ORGANIZATIONAL LEARNING PROCESS IN COLLEGE AT SURABAYA

Eppy Setiyowati¹, Umi Hanik¹, Siti Nurjanah¹, Fendi Suhariadi²

eppy@unusa.ac.id

¹Faculty of Nursing and midwifery, University of Nahdlatul Ulama Surabaya

²Faculty of Psychology Airlangga University
081355718202 , Telp (031) 8291920

Abstrak

Higher college effectively includes input, process and out put. The inputs include human factors, infrastructure facilities, bureaucracy, graduate users, time period of study, guarantee waiting for and information management. The purpose of the research analyzed the implementation of knowledge management in the organizational learning process of the college at Surabaya.

Analytical research design with an experimental approach, the research subjects were lecturers in universities which were divided into control groups and treatment groups with each group there were 77 respondents and data analysis using Anova analysis test.

Qualitative research results show that the application of knowledge management in the process of organizational learning through 7 steps and 4 processes can change individual performance. Based on the ANOVA test results obtained that the application of knowledge management in the process of organizational learning can improve willingness to learn and individual performance.

The conclusion of the study shows that the application of knowledge management in the process of organizational learning in higher education is able to change the willingness to learn and individual performance. Suggestions for organizations should apply knowledge management in the process of continuous organizational learning.

Key word: knowledge, management, organizational, learning, willingness, performance

1. INTRODUCTION

University management can not be separated from components like input, process and output. Input include: student, faculty, librarians, staff (administration) and physical infrastructure. Process include: teaching and learning process. The other part of process are management and administration of education management. Output include: graduates number and graduates quality. Profile of lecturer at Faculty of Public Health, appears in Table below:

Table 1.1 Profile of lecturer at the Faculty Based on Position in Last Three Years 2013, 2014, and 2015.

Position	Total of Lecturers					
	2013		2014		2015	
	n	%	n	%	n	%
1	2	3	4	5	6	7
No functional position	11	14,66	8	10,1	8	10,1
Instructor (<i>Asisten Ahli</i>)	17	22,1	21	26,58	23	29,1
Assistant Professor (<i>Lektor</i>)	24	32,0	26	32,9	26	31,6
Associate Professor (<i>Lektor Kepala</i>)	14	18,7	15	18,98	15	18,98
Professor (<i>Guru Besar</i>)	7	9,3	8	10,1	8	10,1
Total	75	100	79	100	81	100

Source : Self Evaluation 2016

Table 1.1 showed the academic functional position of lecturers at college in Surabaya 2013 to 2015. It showed that instructor number has increased. Although there weren't lecturers who had their position down, with the addition of 6 new faculty lecturers, then there were lecturers from 2013 to 2015 who had inadequate jobs.

The definition of performance on this study were lecturers performance in Three Principles of Higher Education which were teaching, researching and doing community

service as mentioned in format of faculty lecturer workforce.

This study aims to see the issues of lecturer performance in Three Principles of Higher Education at Faculty of Public Health. This study used managerial analysis with knowledge management and organizational learning approaches.

The objective of this study is to analyze implementation of knowledge management in the organizational learning process to increase willingness to learn, , and performance of Three Principles of Higher Education.

2. Research Methode

a. Study Design:

This study was a behavioral research with quantitative design. Lecturers from two faculties were taken as sample. There were 77 lecturers from one faculty which was used as treatment group. Another faculty was used as control group with 77 lecturers were taken as sample.

b. Data Collecting

- 1) Pre-test and post-test were used to measure the willingness to learn, and the performance of Principles of Higher Education before and after implementation of knowledge management in the organizational learning process.
- 2) Conducted observations using observation sheets to see the implementation of the organizational learning process.

c. Intervention stage of the implementation of the knowledge management in the organizational learning process for treatment group:

- 1) Stage 1: workshop for faculty management included: Dean, Head of Department, and Head of Education Department.

Workshop materials:

- a) Knowledge management process
- b) Organizational learning process
- c) Establishing performance framework of Three Principles of Higher Education

2) Stage II: workshop for lecturer from each department.

Workshop materials:

- a) Strategic Plan of Faculty of Public Health
- b) Resource development plan of lecturers in Faculty of Public Health
- c) Establishing performance framework of Three Principles of Higher Education

3) Stage III: Implementation of the organizational learning process:

a) Innovation process

The innovation process is a process to improve the existing knowledge of public health. Renewal stage use knowledge creation method. Knowledge creation is a method to create knowledge of Public Health that has difference compare to the existing Public Health knowledge.

b) Individual learning process

Individual learning process is a process in which every lecture in each department uses knowledge management methods, include knowledge acquisition, knowledge storage, and knowledge refinement to formulate public health knowledge in accordance with the area of knowledge of each department.

c) Collective learning process

d) Collective learning process is a group meeting process. This process aim is to do the learning process together. Collective learning process uses knowledge transfer and knowledge sharing methods. In these methods, the Head of Department transfer and share their knowledge about Public Health concept in accordance with the area of knowledge of each department. The

Public Health concept of each Department is given for being developed by the developing team.

d) The process of collaborative decision making

Collaborative decision making is a process in which Head of Faculty collaborate with all department lecturers in order to get feedback about the Public Health concept. Decision-making process method is knowledge re-use. Head of faculty collaborate with each department in order to get an agreement about Public Health concept. This concept is a foundation for Three Principles of Higher Education work plan.

3 RESULTS AND DISCUSSION

3.1 Results Qualitative

Willingness to learn in intervention group of implementation of the knowledge management in the organizational learning process would be greater than the control group.

Descriptive statistical table of willingness to learn in treatment group and control group as follows:

Table 1.2 Distribution of Willingness to Learn in treatment group and control group

Var	Treatment			
	Min	Max	Mean	SD
1 Will (Pre)	400	420	6,62	1,01
2 Wil (Post)	490	840	698,36	88,24
3 Diff will	-130	200	36,36	6,87
var	Control			
	Min	Max	Mean	SD
1 Will (Pre)	430	830	6,38	9,94
2 Will (Post)	430	810	639,01	99,98
3 Diff (Will)	-160	210	0,58	8,62

The Table showed the difference of mean of willingness to learn in treatment was greater than of control group with a value of 36.3636, while in control group was 0.5882. Standard deviation difference in control group (6.8755) was lower than in treatment group (8.6288).

Performance in the intervention group knowledge management in the organizational learning process implementation would be greater than in control group.

Descriptive statistical table performance treatment group and control group as follows:

Table 1.3 Performance Distribution in treatment group and control group

No	Variable	TREATMENT GROUP			
		Min	Max	Mean	SD
1.	Performance (Pre)	9	25	14,07	3,99
2.	Performance (Post)	9	23	12,98	2,61
3.	Difference of Performance	-12	6	-1,09	3,76

No	Variable	CONTROL GROUP			
		Min	Max	Mean	SD
1.	Performance (Pre)	9	18	9	18
2.	Performance (Post)	9	17	9	17
3.	Difference of Performance	-8	6	-8	6

As shown for performance distribution in table 1.3, the mean difference of performance in the treatment group was -1,0909 and in the control group was 0,1569. The results have also revealed that standard deviation difference in the treatment group (3.76274) was higher than in control group (2.94192).

ANOVA analysis results: The effects of the implementation of the Knowledge management in the organizational learning process to willingness to learn, and performance are shown in table 1.4 below:

Table 1.4 Anova test results: The effects implementation of knowledge

management in the organizational learning process

N	Independent variable	Covariate variable	Dependent variable	Results (Sig P)	Explanation
1.	Will to learn (pre)		Will to learn (post)	0,001	Sig
2.		Performance (pre)	Performance (post)	0,004	Sig

Table 1.4 showed that the implementation of the knowledge management in to organizational learning process the willingness to learn and the performance showed a significant effect (p = 0.001, p = 0.004). It could be concluded that hypothesis 1 and hypothesis 4 were accepted.

3.2 Observation Result

There was no organizational learning process happened in control group. However, some processes such as knowledge creation, knowledge acquisition, knowledge storage, knowledge refinement, knowledge sharing, knowledge transfer, and knowledge re-use, had occurred in observed department. Knowledge re-use process could not be observed completely because of time limit. Decision results between Dean and Head of Department would be informed to author..

Author could participate and did an observation in every department in treatment group. Many variations found in the implementation of the organizational learning process. Although occurred not in sequence, the organizational learning process was occurred in accordance with the agenda that had been planned.

4. ACKNOWLEDGMENTS

The main objective of this study is to increase the willingness to learn and lecturers performance at Health college at Surabaya through the implementation of the

knowledge management in the organizational learning process.

The pre and post measurements of difference of the willingness to learn in treatment group and control group faculty as shown in table 1.1 revealed that the implementation of the organizational learning process has showed improvements. However, initiation for the implementation of the knowledge management in the organizational learning process in treatment group and treatment group faculty is needed to maintain its continuity.

Mean difference of pre and post measurements of personal goals in control group and treatment group faculty showed improvements, as shown in Table 1.2. Initiation for the implementation of the knowledge management in the organizational learning process in treatment group and control group faculty is needed to make it occurs continuously.

Table 1.3 showed a good change of mean difference of pre and post measurements of organizational appreciation perception in treatment group and control group. However, initiation for the implementation of the knowledge management in the organizational learning process in treatment group and treatment group is needed to maintain its continuity

Mean difference of performance measurement in treatment group and control group faculty showed a good change, as shown in Table 1.4. In order to keep the knowledge management in the organizational learning process occurs continuously, then an initiation is needed.

Anova analysis obtained results as shown in Table 1.5 showed that the independent variables are the willingness to learn (Pre). The covariate variable is the performance (pre). The dependent variables are the willingness to learn (post), and performance (post). From the Anova test results showed that the implementation of

the knowledge management in the organizational learning process significantly affected the willingness to learn and performance. The implementation of the knowledge management in the organizational learning process did not significantly affect the perception of personal goals and the organizational appreciation.

REFERENCES

1. Albescu,F., Pugna,I., Paraschiv,D., 2009. *Cross culture knowledge Management*, Academy of economic studies, Bucharest. Informatica Economica Vol.13,No. 4/2009.
2. Aggestam, L.2006. *Learning organization or pengelolaan pengetahuan which came first, the chicken or the egg?*. Information teknologi and control, 2006, vol.35.No.3A.ISSN 1392-124X
3. Buschor, C.Bieri., Forrer Esther., Merki, K, Maag., 2002. *The Willingness of young Swiss to learn in continuing education and training : initial finding from a survey og young adults*. Journal Education & Training, vol. 44. No 4/5 pp 224-232 ISSN: 0040-0912.
4. Castaneda, D. I. and Rios, M. F 2007 . *“From Individual Learning to Pembelajaran organisasi.”* The Electronic Journal of Pengelolaan pengetahuan Volume 5 Issue 4, pp. 363 - 372, available online at www.ejkm.com
5. Cliff Figalo & Nancy Rhine, 2002. *Building the Pengelolaan pengetahuan Network*. Printed in the United States of America. ISBN : 0-471-21549-X
6. Dalkir, K. 2005. *Knowledge management in Theory and*

- Practice*, Elsevier Inc. All right reserved. McGill University
7. Figueroa, A.H et.al, 2006. *Management of knowledge, information and pembelajaran organisasi* in University Libraries. Libri, 2006, vol.56,pp.180-190. ISSN 0024-2667
 8. Gardner and Lambert (2001): “ *Attitudes, motivation and willingness to communicate in their second language: students’ experiences in intensive French and Intensive English*”. (Yuki Hashimoto, University of Hawai’I, Journal Second Language Studies, 20 (2) Spring 2002, pp29-70).
 9. Gibbons, F.X., Gerrard,M., Blanton,H., & Russel,D.W (1998). *Reasoned action & social reaction: willingness and intention as independent predictors of health risk*. Journal of Personality and Social Psychology, 74, 1164-1181.
 10. Jenny Darroch, 2005, *Knowledge Management, Innovation and Performance*, Journal of knowledge management, Vol.9 N0.3, pp. 101-105. Emerald Group Publishing Limited, ISSN 1367-3270
 11. [Jose A. Fadul](#). 2006 Collective Learning: Applying Distributed Cognition for Collective Intelligence, *The International Journal of Learning*, [Volume 16](#), [Issue 4](#), pp.211-220.
 12. Julia Braham, Carol Elston, 2010. *Listening and Interpersonal Skills Review*. Learning Area Coordinator, University of Leeds.
 13. Harpe, B de la., David, Chritina, Dalton Helen, Thomas,Jan. 2009. *Are confidence and willingness the key to the assessment of graduate attributes?*. ATN Assessment Conference 2009, RMIT University.
 14. Indone,I,I. Alexandru, 2009. *Measuring the Performance of Corporate Knowledge Management Systems*; Ioan Cuza University of Iasi, Faculty of Economic and Business Administration. Informatica Economic Vol.13, no. 4/2009.
 15. Jones,P.M. *Collaborative Knowledge Management, Social Networks, and Pembelajaran organisasi*. NASA Ames Research Center. Human Factors Research and Tachnology Division Mail Stop 262-11 Moffett Field CA 94035. pmjones@mail.arc.nasa.gov
 16. King, R William, 2009. *Knowledge Management in the Organizational Learning* Springer Dordrecht Heidelberg London New York
 17. Kwan , A (2006) *Helping University Student Improve Learning Motivation*. City University of Hong Kong Kowloon, Hong Kong.
 18. Leebov W. & Scott G. (1994) *Service Quality Improvement. The Customer Satisfaction Strategy for Health Care*. American Hospital Publishing, Inc.an American Hospital Association Company.
 19. Mark Youman, 2009. Collaborative Decision-Making. ICF International 9300 Lee Highway Fairfax, Virginia 22031 myouman@icfi.com
 20. Madelon L. Finkel, 2011. *Public health in the 21st century*. Praeger An Imprint of ABC-CLIO, LLC Santa Barbara, California, Oxford, England. ISBN 978-0-313-37553-8 (ebook : vol. 3)
 21. McElroy, MW, 2000. *Integrating complexity theory, knowledge management and organizational learning* Journal of knowledge management, vol.4. 3.2000.pp 195-203 MCB University Press.ISSN 1367-3270.

22. Murray E.Jennex. 2008. *Current Issue in Knowledge Management*. San Diego State University, USA
23. Nonaka I & Takeuchi H, 1995. *The knowledge Creating Company*. New York Oxford. Oxford University Press.
24. Omachonu, V.K (2000) *Quality of Care and the Patient: New Criteria for Evaluation*. Health Care Management Review. Vol 15 (4)
25. Polito,T., Waston, K., 2008. *Toward an interdisciplinary Pembelajaran organisasi Framework*, East Carolina University, Greenville ,NC., Marist College, Poughkeepsie,NY
26. Ruth A., 2008., *Employees' Willingness to Participate in Implementation of organizational Change* ., Organizational Vadyba , , 46. ISSN 1392-1142
27. Saade, R George, Faail Nebeba, Tak Mak. 2009. *The Role of Instrinc Motivation in System Adoption: A cross – Cultural Perspective*. Journal of Information, Information Technology and Organizations. Vol.4
28. Senge,P.M 1990. *The fifth discipline: The art and practice of the learning organization*. New York,New York Doubleday.
29. Smith, H.A., 2009. *Exploring strategies for deploying pengelolaan pengetahuan tools and technologies*. Queen's school of business, Queen's University Kingston.Ontorio, Canada K7L 3N6. Journal of information science and technology, 6 (3) 2009.
30. Sonnentag, S. 2002. *Psychological Management of Individual Performance*. Technical University of Braunschweig, Germany. ISBN: 0-471-87726-3