# ICER 2013



The 6th International Conference on Educational Research:
Challenging Education for Future Change



13-14 September, 2013

Faculty of Education, Khon Kaen University, Thailand























ICER 2013: International Conference on Educational Research: 13-14 Sep 2013, KKU, Thailand

## **ICER 2013**

**Editorial Staff:** 

Dr. Ariyaporn Kuroda

Dr. Siribhong Biasiri

Mr. Jakkrapong Thongpai

Asst. Prof. Dr. Prin Thananchaibutr

Asst. Prof. On-anong Ritruechai

Asst. Prof. Pattamaporn Thananchaibutr

## The 6<sup>th</sup> International Conference on Educational Research: Challenging Education for Future Change

Faculty of Education, Khon Kaen University, THAILAND September 13-14, 2013

## **Peer Review Committee:**

Prof. Dr. Noboru Saito Rissho University, Japan

Prof. Dr. Miyo Akita Naruto University of Education, Japan

Prof. Shizumi Shimizu Teikyo University, Japan

Prof. Yeap Ban Har Marshall Cavendish Institute, Singapore

Assoc. Prof. Yutaka Ohara Kanto-gakuin University, Japan

Asst. Prof. Dr. Maitree Inprasitha Khon Kaen University Assoc. Prof. Dr. Unchalee Sarnrattana Khon Kaen University Assoc. Prof. Dr. Kanokorn Somprach Khon Kaen University Assoc. Prof. Dr. Kongsak Thathong Khon Kaen University Assoc. Prof. Dr. Mongkon Donkwa Khon Kaen University Assoc. Prof. Dr. Sumalee Chaijaroen Khon Kaen University

Assoc. Prof. Ladda Silanoi Khon Kaen University Assoc. Prof. Nilmanee Pitak Khon Kaen University Assoc. Prof. Prapaporn Sritrakul Khon Kaen University Assoc. Prof. Wimol Sumaranwanich Khon Kaen University Assoc. Prof. Auijit Pattanajak Khon Kaen University

Asst. Prof. Dr. Chokchai Yuenyong Asst. Prof. Dr. Teerachai Nethanomsak Khon Kaen University Asst. Prof. Dr. Sarintip Raksasataya Khon Kaen University Asst. Prof. Dr. Sitthipon Art-In Khon Kaen University Asst. Prof. Dr. Sumonchat Jaroenkornburi Khon Kaen University

Dr. Channarong Hiengraj Khon Kaen University Dr. Sampan Thinwiangthong Khon Kaen University

## Refer to the ICER conference handbook (abstract only)

ISBN: 978-616-223-307-4

Klang Nana Wittaya, Khon Kaen, THAILAND

Copyright ©2013 by Faculty of Education Khon Kaen University

#### **CIP of ICER conference handbook**

## National Library of Thailand Cataloging in Publication Data

Faculty of Education Khon Kaen University.

ICER 2013: The 6<sup>th</sup> International Conference on Educational Research: Challenging Education for Future Change.--: Faculty of Education Khon Kaen

Khon Kaen University

University, 2013.

320.

1. Educational Science -- Conference. 2. Education -- Research -- Conference. I. Title.

ISBN: 978-616-223-307-4



## Contents

		Page
Message from the Dean	functions of Education	3 4
Message from the Hong Kong I <b>Keynote Address:</b>	institute of Education	4
Michael Kleine	Characteristics of German Mathematics Textbook: Disasters Education	21
Witaya Jeradechackul	Professionalism in the Context of Human Resource Development and Educational Research	22
Susan Grieshaber	Play and Equity in the Early Years	28
Oral Presentation:		
Oral Presenters: Theme 1: Pro Aisah C. Ali, et al	of the service of the	30
Amelia T. Buan, et al	Pre-service Teachers' Reflection on Teaching Competence	38
Chanintorn Boontem, et al	Teacher Content Knowledge for Teaching Mathematics using Lesson Study and Open Approach	45
Damajanti Kusuma Dewi	Improving Analysis Skills in Test Construction course through Portfolio in Higher Education	46
Danang Tandyonomanu	The Construction of Classroom Communication Competence of Pre- Service Teacher in Elementary School Teacher Education	52
Dayamon T. Magdara, et al	Pedagogical Content Knowledge of Biology Teachers in Autonomous Region in Muslim Mindanao: Its Effects on Students' Science Process	61
Diamer Banding Capilitan, et al	Perception and Involvement of Students in Extra-Curricular Activities	62
Edna B. NABUA, et al	The Effect of Innovative Training Course for Non-Multiculturalist Chemistry Teachers	73
Ellen L. Jarantilla, et al	Scientific Literacy and Competency of Chemistry Teachers: A Basis for Training	81
Josefina Carreon Ochoa	The Moderating Effects of Teacher's Self-Efficacy in the Relationship of Job Satisfaction to Teacher's Autonomy, Perceived Collective Efficacy and Supervisory Support	86
Juree Laohapong, et al	Team Leadership: Trait and Composition of Executive Development Case Study: Panyananthaphikkhu Medical Center, Chonprathan Hospital	108
Maureen Jane O. Bandoc	Competency Level of Physical Educators in Higher Educational Institutions	115
Monera A. Salic-Hairulla, et al	Evaluation of the Effectiveness of Practice Teaching Course for the Preservice to Become Inservice Teachers	125
Raimundo Olfos, et al	The Open Class Impact On the beliefs of Teachers about Teaching Statistics	126
Sittie Carolyne C. Santiago, et al	Teachers' Attitudes and Perceptions towards ICT Integration	137
Sompop Suwannarat	A Study on Guidelines for Promoting and Developing Vocational Education Teacher	145
Thoen Seenuan	A Learning Activities Package for Preschool Teacher Development on Classroom Action Research	155



## Contents

	Contents	Page
Sumalee Chaijaroen, et al	Development of the Teachers' performances in both Theory and Practice of Learning Innovation integrated Thai Culture, Local Wisdom and Working Competency for Development for National Competition	1085
Poster Presenters: Theme 2: C	urriculum and Instruction, Learning in classroom context	
Aimee Roble Pareno	Development of an IT-Based Package for Teaching Least Learned Topics in Electromagnetism	1087
Andi Mariono	Instructional Video Media Development for Visual Language Topic in the Course of Video/TV Media Development in the Educational Technology Department State University of Surabaya	1088
Anita Trisiana	Identification of Learning Model Development at Citizenship Education to Strengthen Moral Values of Character Education of Senior High School in Surakarta City	1097
Anon Suanpradit, et al	Development of the Theoretically Conceptual Framework of the Onlined Environmental Learning Model Following to the Constructivists to Promote Thinking Creatively and the Innovation on the Learning Skill in the 21st Century	1105
Apichat Saeueng, et al	Discussion in Mathematics Classroom Using Lesson Study and Open Approach	1106
Araya Nolukmuen, et al	A Study of Learning Achievement in Thai Learning Substance of Matthayomsuksa 1 Students Using Integrated Learning Unit	1107
Arunee Sopa, et al	The Development of Mathematics Learning Activities Based on Constructivist Instructional Emphasizing Analytical Thinking Skills on Probability for Mattayomsuksa 3	1114
Asmuni	The Application of Softskills Learning Model Based Andragogy to Improve Students' Personal Competencies (A Study on Education Program of Undergraduate in Jombang, East Java, Indonesia)	1120
Bhudtree Wetpichetkosol, et al	Constructivist on Network Learning Environment Model	1126
Ervan Johan Wicaksana	The Influence of Rewards to Promote the Students' Learning Achievement in Junior High Schools	1127
Gunarhadi, Ahmadi	Improving Performance in Mathematics Learning through Multisensory for Students with Special Needs in Special Schools	1137
Hariyanto	The Correlation between the Lecturers' Competency and Students' Academic Achievement at Midwifery Academy	1138
Janapit Arsanachai, et al	The Development of Mathematics Learning Activities Based on Constructivist Instructional Model Emphasizing Analytical Thinking Skills on Triangles for Prathomsuksa 5	1146
Khanitha Siripan, et al	The Study of Ideas of Number Senses about Open-Ended Problem Solutions of Prathom Suksa 1 Students by Lesson Study and Open Approach	1154
Kruewun Khongrukchang, et al	A Study of ASEAN Citizenship Skill Using 7Es Learning Cycle in the ASEAN Studies Supplementary Course for Grade 12 Students at Kham Kaen Nakorn School	1155



## The Application of Soft skills Learning Model Based Andragogy to Improve Students' Social and Personal Competencies (A Study on Education Program of Undergraduate in Jombang, East Java, Indonesia)

**Asmuni**<sup>1</sup> (astikip@gmail.com)

#### **Abstract**

This study aims to (1) obtain an empirical overview of the application of learning soft skills-based andragogy to improve student's social and personal comptencies teacher training program on undergraduate of education program in Jombang, East Java, Indonesia; and (2) describe the constrains which is faced by the lecturer in implementing the model.

This study is a descriptive reserch, which was done on two private universities in Jombang, East Java, Indonesia, which has the educational program, they are STKIP PGRI Jombang (6 departments), and Universitas Pesantren Tinggi Darul Ulum (2 departments). The sample was taken in purposive cluster sampling. Questionnaire in the form of self evaluation was used as data collection technique. Meanwhile, statistical descriptive analysis was used as the technique of analysis.

The result of the study shows that the majority of lecturers have not yet applied the soft skills learning model based andragogy to improve the students' social and personal competencies. But most of them were applying SCL (Student Centre Learning). It can be seen from he result of analysis that the lecturers apply Self-Directed Learning (39%), Problem-Based learning (40%), Project-Based Learning (41), Case Study (51%), Contextual learning (67%), Collaborative Learning (76%), and Cooperative Learning (79%). Whereas the constraint which appear was the culture of learning/atmosphere of learning (36%), students' learning motivation factor (37%), students autonomy factor (39%), Students' creativity factor (40%), and the lecturer's perception toward students' maturity factor (42%).

**Keywrods:** application, learning model, soft skills, andragogy, personal competencies.

### Introduction

21st century is the century of science and technology. Here, the workplace has been demanding its worker not only to have sufficient academic competencies (hard skills) but also the soft skills. As consequences the lecturers at universities are faced a high demand, in order that graduates are ready for the workplace. A survey conducted by the Graduate Management Admission Council found that although MBAs were strong in analytical aptitude, quantitative expertise, and information-gathering ability, they were sorely lacking in other critical areas that employers find equally attractive: strategic thinking, written and oral communication, leadership, and adaptability. Increasing workplace and customer diversity across age, gender, racial, and ethnic lines, along with business globalization and virtual offices, have only heightened the need for strengthening soft skills competency (Klaus, 2008). In Indonesia, in 2007 Tempo Magazine has selected 10 universities for their graduates of character. Some important characters in the workplace he has put forward, namely: willing to work hard, having high confidence, having a vision for the future, be able to work in a team, have a mature faith, having analytical thinking, adaptable, able to work under pressure, proficient in English, and able to organize job (Sailah, 2008). Some of them are non-academic, or soft skills which is defined as a person's ability to relate to others (interpersonal skill) and the ability to manage their self (intrapersonal skill) (Sailah, 2008; Listyani, 2011). Whereas Klaus

<sup>&</sup>lt;sup>1</sup>Department of Pancasila and Civic Education, STKIP PGRI Jombang, East Java, Indonesia



(2008), defines that soft skills encompass personal, social, communication, and self-management behaviors. They cover a wide spectrum of abilities and traits: being self-aware, trustworthiness, conscientiousness, adaptability, critical thinking, attitude, initiative, empathy, confidence, integrity, self-control, organizational awareness, likability, influence, risk taking, problem solving, leadership, time management, and then some.

Soft skills is really needed in the work and business place. Astra HR research and other researchers from various countries concluded that the success of a learner to apply the learning outcomes in the workplace 80% due to soft skills, while learning acquired through lecture (hard skills) accounted only for 20% on the success (Sailah (ed), 2012). While in the universities, soft skills portion in the curriculum only gets an average of 10% only, is not counted if the student during his studies have never participated in the organization, which make the student weaker in the soft skills (Sailah, 2008). Therefore, university should move their paradigm for not only focus on academically (hard skills) but also to integrate hard skills with soft skills. Hard skills is still important, in which soft skills grow through the well planned study of hard skills.

If it is analogized extremely, there is no space under the table (soft skills) to relax foot comfortably while working without a table (hard skills) which is ergonomically designed. So, no one gets space under the table (soft skills) in the absence of a table (hard skills) separately (Sailah (ed), 2012). The need to change the paradigm is urgent, especially the development and preparation of the competency-based curriculum (CBC), which allows the student center learning (SCL) with a psychological condition as adult leaner (student above 19 years old, according to the UU RI No. 1. 1974 about marital, are considered as adult). Hence, adult education is as different from ordinary schooling as adult life, with its individual and social responsibilities, is different from the protected life of the child (Knowles, 2005). Therefore the learning approach should be distinguished. According to Knowles (2005), that pedagogy is for children and andragogy is for adults. Although she also said that concepts of andragogy are beginning to make an impact on the theory and practice of elementary, secondary, and collegiate education.

He reasoned that a distinction between the concepts of pedagogy and andragogy is required to fully grasp the concept of andragogy. The pedagogical model, designed for teaching children, assigns to the teacher full responsibility for all decision making about the learning content, method, timing, and evaluation. Learners play a submissive role in the educational dynamics. In contrast, the andragogical model focuses on the education of adults and is based on the following precepts: adults need to know why they need to learn something; adults maintain the concept of responsibility for their own decisions, their own lives; adults enter the educational activity with a greater volume and more varied experiences than do children; adults have a readiness to learn those things that they need to know in order to cope effectively with real-life situations; adults are life-centered in their orientation to learning; and adults are more responsive to internal motivators than external motivators. The pedagogical model is an ideological model that excludes the andragogical assumptions. The andragogical model is a system of assumptions that includes that pedagogical assumptions.

Knowles propotes six andragogy approaches in the learning soft skills for students (adult learner), they are; (1) the learner's need to know, (2) self-concept of the learner, (3) prior experience of the learner, (4) readiness to learn, (5) orientation to learning, and (6) motivation to learn (Knowles, 2005).

Application of the principle of andragogy as a base in soft skills learning model with considerations on the Knowles model (2004) states that (1) the andragogical model is a system of elements that can be adopted or adapted in whole or in part. It is not an ideology that must be applied totally and without modification. In fact, an essential feature of andragogy is flexibility; and (2) the appropriate starting point and strategies for applying the



andragogical model depend on the situation. Beside that Andragogy approach is based on assumptions that allow students to develop and enrich themselves with soft skills abilities. Key assumptions about adult learners, according to Knowles (2004, 2005) are: (1) Adults are motivated to learn as they experience needs and interests that learning will satisfy; (2) adults' orientation to learning is life-centered; (3) experience is the richest source for adult's learning; (4) adults have a deep need to be self-directing; and (5) individual differences among people increase with age.

In other hand, teacher competencies which should be taught to the students of teacher college as stated in Government Regulation RI No. 19, 2005 on National Education Standards, includes four competencies, namely (1) pedagogic competence, (2) personal competence, (3) professional competence, and (4) social competence. While the curriculum and the learning system tends to be on the mastery of pedagogic competence and professional competence, while two other competencies, ie personal competence and social competence are rarely be emphasized.

Due to the condition as a background of the study, this research investigate how is the application of soft skills-based learning model Andragogy to improve social and personal competence the student of teacher training college? Whereas this study aims to (1) obtain an empirical overview of the application of learning soft skills-based andragogy to improve student's social and personal comptencies teacher training program on undergraduate of education program in Jombang, East Java, Indonesia; and (2) describe the constrains which is faced by the lecturer in implementing the model.

## Design

This study is a descriptive research. The descriptive research attempts to describe, explain and interpret conditions of the present i.e. "what is'. The purpose of a descriptive research is to examine a phenomenon that is occurring at a specific place(s) and time. A descriptive research is concerned with conditions, practices, structures, differences or relationships that exist, opinions held, processes that are going on or trends that are evident (Anonymous. tth.).

In education, descriptive research has function more for solving practical problems rather than the development of science. Therefore, researchers are just trying to capture the events and happenings at the center of attention then describe it as it is, so the utilization of research findings are only valid at the time anyway. Because it does not require any hypothesis, no need to manipulate a single variable and may be variable, because the symptoms and events have been there and lived to describe it.(sugiyono, 2010; Sudjana & Ibrahim, 1989).

This study was done on two private universities in Jombang, East Java, Indonesia, which has the educational program, they are STKIP PGRI Jombang (6 departments), and Universitas Pesantren Tinggi Darul Ulum (2 departments). The sample was taken in purposive cluster sampling, the combination of the type of probability sampling and non-probability sampling. In this sampling technique the researcher selects a "typical group" of individuals which is regarded more representative to represent the larger population, the number of samples is determined by 100 people, but the sample units drawn at random, and then perform data collection from all units in the group. The respondent of this study is lectures who have a minimum of two years teaching experience, in all areas of expertise. Questionnaire in the form of self evaluation was used as data collection technique. The instrument of the study was developed after through validity and relebialitas. Meanwhile, statistical descriptive analysis was used as the technique of analysis.



This research procedure are (1) formulating the research problem, (2) planning data collection, (3) drafting the questionnaire that will be in-tray out-right, (4) conducting tray out questionnaires; (5) measuring the validity and releabilities, (6) revising the draft questionnaire; (7) sending questionnaires to respondents and collecting; (8) determining the data collection procedures, (9) processing the data collected (the data checking, data classification, scoring and tabulation of data,; (10) analyzing the data by percentage technique, and (11) drawing the conclusion.

## **Finding**

The result of the study shows that the mojority of lecturers have not yet applied the soft skills learning model based andragogy to improve the students' social and personal competencies. They state that they have not completed the training / warkshop (1) model of learning soft skills 82%, (2) learning model Andragogy 86%, (3) learning model based soft skills Andragogy 98%. While an understanding of soft skills, 76% claimed to have understood, but 51% did not control any attribute soft skills. Similarly, an understanding of andragogy (adult education), only 26% have the ability of Andragogy, but 74% said that they had attended training on other fields that apply andragogy method.

The hand book of curriculum development and competency-based higher education (CBC) published in 2012, has mandated that the higher education curriculum should be aligned with the Indonesian Qualification Framework. This mandate implicitly contains an obligation for the university to give their graduates a soft skills, resulting in the development and curriculum development should take into account opportunities for mastery of soft skills for the learners. Curriculum that empower and facilitate the acquisition of soft skills include the charge in favor of the formation of national character positive, entrepreneurial, intelligent and diligent work ethic, lifelong learning, as well as social care and concern for a sustainable environment. Special concern for the environment is manifested in EfSD (Education for Sustainable Development) or better known as ESD, in the absence of *for*. EfSD education started to be developed in line with the program of the United Nations Commission on Sustainable Development (CSD) since 1998 (Sailah, 2012). Following up on the mandate, the university has conducted a series of activities to adjust the curriculum, and also intoducing the development of soft skills through lectures.

Therefore the lecturers who were respondents in this study expressed their enthusiasm if there is a training/workshop on soft skills learning model, Andragogy, and soft skills-based learning model andragogy. 78% of respondents expressed readiness to attend training/workshop on soft skills learning, andragogy 73%, and 79% soft skills-based learning model andragogy. This proves that the lecturers awareness of the importance of soft skills for student teachers deserve a positive response. In line with Fullan (2007) statement that "Educational change depends on what teachers do and think –it's as simple and as complex as that. It would all be so easy if we could legislate changes in thinking. Classrooms and schools become effective when (1) quality people are recruited to teaching, and (2) the workplace is organized to energize teachers and reward accomplishments. The two are intimately related. Professionally rewarding workplace conditions attract and retain good people."

However, it must be admitted that most of the respondents had applying SCL (Student Centre Learning). It can be seen from he result of analysis that the lecturers apply Self-Directed Learning (39%), Problem-Based learning (40%), Project-Based Learning (41), Case Study (51%), Contextual learning (67%), Collaborative Learning (76%), and Cooperative Learning (79%). The data shows that most of the responden has been working on the improvement of the student by some soft skills attributes, although it is not explicitly stated that what he did was a learning model of soft skills. Because the basic concept of student-centered learning (SCL) that is learning to apply the principles that (1) learning is an active



process, (2) learning requires mental reflection, (3) learning is a social activity, (4) learning is built upon the knowledge that have held the learner (prior knowledge), (5) learning takes time; (6) learning requires motivation; (7) learning is a quantitative increase in knowledge; (8) learning as a process of remembering (learning an activity store information that can be reproduced), (9) is a learning process to acquire facts, skills, and methods that can be stored and used when needed; (10) learning in essence create and develop meaning, and (11) it is a process of learning and understanding a reality in ways that different (Rahayu (ed), 2005).

Whereas the constraint which appear was the culture of learning/atmosphere of learning (36%), students' learning motivation factor (37%), students autonomy factor (39%), Students' creativity factor (40%), and the lecturer's perception toward students' maturity factor (42%). The problems will be solved as long as respondents and universities have "passion" which is the in the first place in "ten common traits of the best business leaders" as stated aldo in the book of Neff & Citrin, tahun 1999, entitled "Lesson From The Top" (Sailah, 2008).

#### Recommendation

- (1) Expectations and the spirit of the lecturers to have the ability of learning and andragogy soft skills need to be appreciated by the university to conduct training / workshop or other forms as a form of tribute to them.
- (2) The results of the research could be used as the initial research or study materials to perform Research and Development that aims to produce a learning model based soft skills Andragogy to improve social and personal competence of students.
- (3) The results of this study can be used as a basis for consideration by the university to take the policy in order to develop faculty, improve the quality of lectures, graduates competency development, etc.
- (4) For university, expectations and the lecturers favor to have the ability of soft skills learning and andragogy need to be appreciated by conducting workshop or other forms as a form of tribute to them.

#### Reference

Anonymous. tth. Descriptive Research. (dalam http://www.mu.ac.in/myweb\_test/Research% 20Methadology-Paper-3/Chapter-5.pdf., diakses 27 Juni 2013).

Fullan, Michael. 2007. *The NEW Meaning of Educational Change, Fourth Edition*. New York: Teachers College Press

Klaus, Peggy. 2008. The Hard Truth About Soft Skills, Workplace Lessons Smart People Wish They'd Learned Sooner. Collins, February 1, 2008, Paperback. HarperCollins e-books. Knowles, Malcolm S. 1984. Andragogy in Action. San Francisco: Jossey-Bass.

Knowles, Malcolm S. et.al. 2005. The Adult Learner, The Definitive Classic in Adult Education and Human Resource Development, Sixth Edition. Burlington, MA, USA: Elsevier Inc.

Listyani, Endang. 2011. Pengembangan Softskill Mahasiswa Calon Guru Melalui Perkuliahan Di Jurusan Pendidikan Matematika. *Prosiding Seminar Nasional Penelitian, Pendidikan dan Penerapan MIPA*, 14 Mei 2011. Yogyakarta: Fakultas MIPA Universitas Negeri Yogyakarta, p.133-138.

Peraturan Pemerintah RI No. 19 tahun 2005 tentang Standar Nasional Pendidikan

Rahayu, Gandes Retno (ed). 2005. *Pembelajaran Berpusat Mahasiswa*. Yogyakarta: Pusat Pengembangan Pendidikan Universitas Gadjah Mada

Sailah, Illah. 2008. *Pengembangan Soft Skills Di Perguruan Tinggi*. Jakarta: Tim Kerja Pengembangan Soft Skills, Direktorat Jenderal Pendidikan Tinggi, Departemen Pendidikan Nasional RI.



Sailah, Illah (ed). 2012. Panduan Pengembangan dan Penyusunan Kurikulum Pendidikan Tinggi (KPT), Pendekatan Kurikulum Berbasis Kompetensi (KBK), dan Pendidikan Berbasis Capaian (PBC). Jakarta: Direktorat Pembelajaran dan Kemahasiswaan, Direktorat Jenderal Pendidikan Tinggi, Kementerian Pendidikan dan Kebudayaan RI. Sudjana, Nana dan Ibrahim. 1989. Penelitian dan Penilaian Pendidikan. Bandung: Sinar Baru Sugiyono: 2010: Metode penelitian pendidikan, Pendekatan kuantintatif, kualitatif dan R&D. Bandung: Alfabeta