

# The Relationship between Competency-Based Learning and Learning Efficiency of Media Communication Students at Suan Sunandha Rajabhat University

Somtop Keawchuer

**Abstract**—This research aims to study (1) the relationship between competency-based learning and learning efficiency of new media communication students at Suan Sunandha University (2) the demographic factor effect on learning efficiency of students at Suan Sunandha University. This research method will use quantitative research; data was collected by questionnaires distributed to students from new media communication in management science faculty of Suan Sunandha Rajabhat University for 1340 sample by purposive sampling method. Data was analyzed by descriptive statistic including percentage, mean, standard deviation and inferential statistic including T-test, ANOVA and Pearson correlation for hypothesis testing. The results showed that the competency-based learning in term of ability to communicate, ability to think and solve the problem, life skills and ability to use technology has a significant relationship with learning efficiency in term of the cognitive domain, psychomotor domain and affective domain at the 0.05 level and which is in harmony with the research hypotheses.

**Keywords**—Competency-based learning, learning efficiency, new media communication students, Suan Sunandha Rajabhat University.

## I. INTRODUCTION

HUMAN society is a society of learning (learning society), humans can learn and develop at any time. Learning and accumulated knowledge and professional development. It is important to know the truth, and the academic knowledge they have a direct effect on the human bordered pipeline. The solution in both of the student of the university which is caused by the human intellect, knowledge and the cause and effect of the use of intelligence is the key success factor. Current students attended the start of the needs of higher education as a source of knowledge that will enhance their academic progress for use as a factor in human resource development. As a fundamental factor in the development of the country guest, therefore, give priority to education. The idea that people with higher education are likely to progress in various areas, so guests have a better education, so try to reach the highest level. It is said that Thailand is a popular social society to get a degree [1]. In this situation, all of the people will focus on the learners to help the students learn more effectively. Guidelines for the management of the study and the learning process that appeared in the national education, it is evident that a change

Somtop Keawchuer is with Faculty of Management Science, Suan Sunandha Rajabhat University, Bangkok, Thailand (phone: +6621601090; fax: +6621601491; e-mail: somtop.ke@ssru.ac.th).

from the original. It emphasizes the importance of learning more focus on learning from practice and can be applied in their life nowadays. The learning process in order to meet learners' feature. There are many processes for integrated learning process is another way to focus on the learners and learning to the link of knowledge to be applied in real life. Therefore, the learning performance is an important foundation. The development of the students who were interested in learning about the relationship between performance and learning with learning performance of students.

Research purposes are:

1. To study the learning performance of students in new media communication in Suan Sunandha Rajabhat University.
2. To study the relationship between academic performance and learning performance of students to learn to communicate through new media Suan Sunandha Rajabhat University.

## II. LITERATURE REVIEW

### A. Concepts of Learning Inefficiency

Our aim is to explain the variation in learning gain observed across firms. Firms have different abilities to learn. The performance of a firm does not improve automatically with experience. Learning progress is not costless. There are factors for which firms have heterogeneous ability to learn. The factors include proficiency of manpower which can be enhanced by training and organizational technology which can be improved by R&D investment. Differences in firm structure, coordination and routines can also lead to the variation of the firm's learning ability. Hence, the proposition underlying this study is that the observed productivity experience relationship is the effect of both the passive learning and the management and training effort described as first and second order learning, respectively [2]. Inter-firm learning efficiency is a relative measure quantifying the learning progress of a particular firm relative to the 'best practice firm' from the set of comparable firms (firms having same production and size in industry) available in the industry. It reflects the differences in the research, training and investment effort, managerial and interacting effort, etc. While most literature in economics conceptualizes learning-by-doing as a costless by-product of joint.

Production) which follow from the cost quantity power law, why do similar firms in an industry present heterogeneous learning elasticity? Notwithstanding the same experience (or cumulative past output) why do firms present different productivity gains We look for a flexible functional form to fit the learning pattern for capturing the three stages of learning progress concept. The logistic differential equation is used to represent the productivity experience relationship. As time progresses, the firm learns more about the production technology parameter and maximizes production potential with given inputs and learn better input substitution relationships [3].

The height of the progress curve is at  $V \rightarrow \infty$ . The state of firm knowledge increases with cumulative output at an increasing rate until  $A = a / 2$  (the inflection point), and after that, the knowledge increases at a decreasing rate and asymptotically reaches the upper bound. This functional form captures all the essential properties of the three stage learning progress. The explicit solution of this differential equation can be written as Training and research, quality of the personnel and infrastructure are some reasons why some firms learn faster than others. Firms have different productivities because some firms have learned the production parameters faster than others. The question is then can we measure the difference in learning abilities in a cohort of firms having identical initial productivity or the state of knowledge? The difference between the learning progress curve of any firm and that of the 'best practice firm' is defined as inter-firm learning inefficiency which reflects the inability of a firm to reach the optimal production potential. The differential equation for a general firm is the explicit solution for a general firm is Parameter  $h$  is the inefficiency constant of learning or level of learning inefficiency which reflects the inability of a firm to learn the production parameters (input-output response and input-input substitution) optimally. The learning progress curves for a general firm and the 'best practice firm. Due to superior training and infrastructure, the best practice firm attains the maximum production potential whereas a general firm is able to reach only a limited production potential because of limited investment in training and infrastructure. We assume that both firms have same initial state of knowledge [4].

### *B. Competency-Based Learning Concept*

The intention of implementing CBE/T was to increase and improve the skills of workers for industry. However, it has been suggested that there had been very little research into the area of CBE/T prior to its implementation. It states that: There was little-reported research evidence that competency-based training was able to deliver the efficacy and results touted in the many papers, reports, and calls for this needed reform. The idea was timely, the approach was grasped with almost missionary zeal by some, and the focus was seen as common sense. The lack of research evidence clearly justifying the approach or demonstrating clear links to the alleged competitive improvements for individual and even national business efforts was not an issue. This viewpoint was

supported by Newman, who contended that: "in the interests of everyone the principles behind competency-based training should have been subjected to critical scrutiny." Although CBE/T was introduced in the VET sector at a national level and supported by the states and territories, its introduction has created a great deal of debate amongst all sections of educational professionals [5]. The intrinsic changes stemming from its implementation were bound to create controversy. As argued by teachers and trainers been opposed to the concept of CBT but also the way in which CBT was introduced into some VET organizations was not ideal. Such a major curriculum change was bound to incur opposition. Many teachers and trainers arrayed themselves into the "for" and "against" camps and in such a climate it has not always been easy or appropriate to attempt to examine the effects of CBT.

Harris believes that CBE/T tends to polarize opinions and that the contrasting viewpoints have often stemmed from the lack of a common definition, resulting in the tangential discussion but the limited commonality of purpose. They suggest that proponents of CBE/T often see its implementation as a 'cure-all' which will overcome many of the perceived problems in education, training, and assessment. These people view competency-based learning as a means of improving the concurrence between education/training and the requirements of the workplace [6]. The critics of CBE/T believe that its promoters assume that more education and training will result in better economic performance and that serving the needs of industry best serves the individual and society. Many opponents to the concept of CBE/T see it as reductionist, rigid, atomised, narrow, and pedagogically unsound, whilst others view it as a 'controlling mechanism', restricting the professionalism of the educator, limiting a holistic approach to curricula, and stifling the expression of the student - presenting a narrow, fundamentally flawed conception of competence. Consider that a narrowness of approach and definition manifests itself in a number ways due to an over-emphasis on technical task skills at the expense of general social, intellectual and emotional abilities. They suggest that competency should not be confused with performance and that a large variety of attributes underpinning performance must be considered in a competency analysis [3].

The Thailand Chamber of Commerce and Industry regards CBE/T to be a type of training that that places the primary emphasis on what a person can do as a result of training (outcome), rather than the process involved in training (input). This suggests a rather narrow employment-related role for competency-based education and training which involves a task-specific learning process, with little reference to life-skills that relate to both employment and social environments.

In the course of data collection for this study, one of the participants suggested that, in order to prevent the My therapy course from being too employment-related, the curriculum should be developed in conjunction with the competency standards of the relevant professional body. Many professions have produced 'competency standards' that can be used by curriculum developers as a guide to establishing syllabuses. It might be assumed that any professional body would expect a

curriculum to be broad enough to include values relating to the community in general as well as discipline-specific skills related to the workplace [5].

There has been a limited amount of research determining whether the introduction of CBE/T has brought with it an increase in competency skills. This may be due to the difficulty involved in determining whether the competency skills have improved or deteriorated, due to the non-grading approach to assessment that is commonly used. However, Smith and Keating contend that there appears to be an increase in the use of graded assessment and that this is especially so in New South Wales.

Just as definitions of 'competency' have been many and varied, there are differences of opinion as to what constitutes a 'Competency-based Learning Program' express the view that "it still remains the case that a precise and widely accepted definition of competencies continues to elude both those researching the field and the trainers themselves".

Competency-based programs or curriculum can be described as being task-based and outcome-oriented, as distinct from input or content-oriented. They are based on industry or professional competency standards, with assessment based on a set of established criteria. The Mayer Committee established seven 'Key Competencies' they considered essential for effective participation in occupational settings including collecting, analyzing and organizing ideas and information; expressing ideas and information; planning and organizing activities; working with others and in teams; using mathematical ideas and techniques; and solving problems and using technology. The Mayer Committee felt these 'Key Competencies' should be generic to all courses and considered that this would enable knowledge and skills acquired in the learning program to be transferred to the workplace. The Committee also considered the inclusion of 'cultural understanding' as an additional competency, but stated in the report that "both the principles and characteristics the committee had used to construct the set of key competencies preclude the inclusion of values and attitudes."

The inclusion in the Committee's Report on 'Generic and Key Competencies' broadened the concept of employment-related competence, and commented that: Employment-related competence should refer not only to a narrow skills based vocational content but also requires generic and key competencies, which are required for effective entry into a wide range of occupations and industries [6].

The depth and level at which the key competencies are taught and the means of delivery may vary, but they are considered an important aspect of the curriculum - without which the learning program would lose its integrity. However, this statement continues to equate the term competence with occupational and industry-related skills.

The mid-1990s saw a considerable effort being given to the implementation of the Mayer 'Key Competencies' in Australian Schools and VET programs. More recently, Australian industry re-established a focus on key competencies - otherwise referred to as generic skills. The Australian Industry Group commissioned a report into the

training needs of Australian industries, consulting a large number of companies in the manufacturing, construction, and information technology sectors. The research from this report found that an increasing premium was being placed on generic skills including information technology, problem-solving, team skills, willingness and the ability to adapt [7].

With regards to what constitutes a competency-based program, have suggested that the majority of curriculum developers and teachers or trainers within the VET sector would accept the notion that there are a number of 'key features' that can be categorized as being part of competency-based learning programs. Ten of these features include: 1) based on competency standards; 2) outcome, not input focused; 3) involvement with industry; 4) recognition of prior learning; 5) modularized; 6) self-paced; 7) skills-based assessment rather than knowledge-based; 8) criterion-referenced assessment not norm-referenced; 9) flexibility in delivery; and 10) competencies that are widely recognized. A more detailed reference to these features can be found. They have suggested that some learning programs may comprise differing combinations of these features, and not every competency-based learning program will include all of these 'key features.' However, they are of the opinion that for a learning program to be considered "competency-based," it would require the inclusion of a substantial proportion of these features.

This suggestion of a certain amount of flexibility in curriculum design is an important point to consider, as the research in this thesis was not based on the creation of a complete competency-based program, but conducted to consider if the inclusion of aspects of competency-based learning is beneficial in the task-oriented units within the therapy degree course [7].

In Thailand, there are many terms used to replace the competency such as performance, capacity, and performance by using the technology such as google dictionary for translate the assignment. The ability to use the word as a psychological concept refers to the ability to learn to perform or the ability and the right to practice the concepts of measurement and evaluation of the person using the word Potential focuses on the ability of individuals to work effectively.

McClelland was based on the concept of providing a means to show the relationship of the performance. The cause of the behavior and the results are excellent, such as the Hay Group meaning that performance is a pattern of behavior, abilities and attributes that a worker should have a duty to achieve results and the members of the organization have developed their own to work effectively in current and future needs, according to the organization policy as well [4].

### III. METHODOLOGY

Research on the relationship between performance and learning performance of students and the field of communication through new media this university aims to study the learning performance of students in new media communication university and factors associated with the relationship between academic performance and learning

performance of students to learn to communicate through new media in university. This research is done by the quantitative method by using a questionnaire as a tool.

The researchers conducted the study to define and follow the steps below:

1. Source of Information,
2. Determination of population. The sample was selected,
3. The creation of the tools used in research,
4. Quality Test Tools,
5. Data Collection,
6. Data Analysis,
7. Statistical methods used in the research.

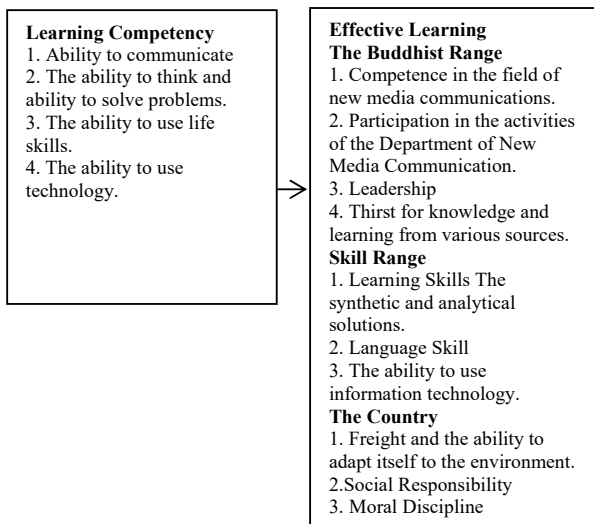


Fig. 1 Conceptual Framework

IV. FINDING

The demographic of the respondent of this study are the student study in the field of communication through new media Suan Sunandha Rajabhat University.

TABLE I  
DEMOGRAPHIC OF RESPONDENT

Personal factors	Number	Percent
1. Sex		
- Male	57	42.5
- Female	77	57.5
2. Age		
- 18-20 years	58	43.3
- 21-23 years	73	54.5
- 24 years	3	2.2
3. Academic Level		
- Class 1	52	38.8
- Class 2	35	26.1
- Class 3	27	20.1
- Class 4	20	14.9

Table I showed that personal queries about the relationship of performance to learn the effectiveness of student learning. The field of communication through new media by sex, males were 57 people is equal 42.5 percent, and for the female the

frequency are 77 people is equal 57.5 percent and regarding the age of oldest is aged 23-21 years, the number 73, representing a 54.5 percent reserve is aged 20-18 years, the number 58, representing a 43.3 percent and a minimum age of 24 years or more of three people representing hundreds. 2

By highest level of the academic year at one of 52 people, representing 38.8 percent. Second is the 2<sup>nd</sup> year of 38 people, representing 26.1 percent of the 3-27 year, representing 20.1 percent and the lowest was the 4<sup>th</sup> year of 20 people, representing 14.9 percent.

TABLE II  
LEARNING PERFORMANCE OF STUDENTS. THE FIELD OF COMMUNICATION THROUGH NEW MEDIA SUAN SUNANDHA RAJABHAT UNIVERSITY

Learning Competency	average	S.D.	degree	rating
1. The performance of the Buddhist learning range.	4.4813	.20708	much	2
2. The performance of a range of learning skills.	4.1368	.34736	much	3
3. The performance of the Learning Country.	4.7040	.27621	much	1
<b>Total</b>	<b>13.3221</b>	<b>0.83065</b>	much	

Table II showed that the effectiveness of student learning. The field of communication through new media Suan Sunandha Rajabhat University

The overall level. (The total average 13.3221) Maximum efficiency of the check, learn the mental (average 4.7040), followed by the performance of the check, learn the Buddhist Range (average 4.4813), while the efficiency of the check, learn less. The most effective learning of the Buddhist Range (average 4.1368), however the set criteria on the effectiveness of student learning. The field of communication through new media the university in all aspects. Learning performance of students The field of communication through new media Suan Sunandha Rajabhat University performance of learning the mental (average 4.7040), followed by the performance of learning the Buddhist Range (average 4.4813) and the efficiency of learning. minimum efficiency of learning the Buddhist Range (average 4.1368), however the set criteria on the effectiveness of student learning. The field of communication through new media Suan Sunandha Rajabhat University in all aspects.

The findings of the relationship between performance and learning with learning performance of students. The field of communication through new media Suan Sunandha Rajabhat University performance of student learning the field of communication through new media Suan Sunandha Rajabhat University as a whole at a high level. (The total average 18.597) most are the ability to use technology (4.8955 average), followed by the ability to communicate. (Average 4.7090) the ability to use life skills (average 4.5970), the side with the counterpart of the car that learning is minimal ability to think analytically / ability to solve problems (average 4.3955), however. set criteria on the performance of student learning. The field of communication through new media Suan Sunandha Rajabhat University in all aspects.

## V. DISCUSSION

The study found that when personal factors to test the statistical relationship found that students with effective learning students. The field of communication through new media Suan Sunandha Rajabhat University, both male and female have no relationship causes performance of student learning, and the age of the students range 18-20 years, 21-23 years and 24 years that have no relationship to the effectiveness of student learning. And the end of the first-year students of all ages was not related to the cause of learning performance of students [7].

When the researchers applied learning performance variables to test the statistical relationship with powerful learning skills of the student's range. The field of new media communications that Suan Sunandha Rajabhat University. Performance Learning Students of the field of communication through new media Suan Sunandha Rajabhat University is a statistical correlation with the performance of student learning. Students who have performance in areas such as the ability to communicate, the ability to critical thinking / problem-solving ability, the ability to use life skills and the ability to use the technology. The relationship was statistically significant with learning performance of students in the field of the cognitive form [4] and the competence in the field of new media communications participation in the activities of the department of new media communication. The thirst for knowledge leadership learn from various sources and students in the field of mental disciplines include communication through new media and the ability to adapt itself to the environment, A socially responsible conduct of ethics, which is the output from the learning performance of students. The field of new media communications package could make effective learning but the range of skills include learning skills, analytical thinking synthesis and problem-solving language proficiency and the ability to use information technology has no relation to effective learning.

## VI. RECOMMENDATION AND FUTURE STUDIES

In this study, researchers found that the learning capacity of students to determine the effectiveness of learning are not able to relate the skills to learn such as analytical thinking synthesis and problem-solving, language proficiency and the ability to use information technology are Requires planning and brainstorm in building competencies to achieve performance consistent with the range of skills in a relationship.

## ACKNOWLEDGMENT

The author would like to thank Assoc. Prof. Dr. Luedech Girdwichai, The President of Suan Sunandha Rajabhat University, Bangkok, Thailand for financial support. A million thanks to Asst. Prof. Dr. Prateep Wajeetongratana, the Dean of Faculty of Management Science for the full support in this research.

## REFERENCES

- [1] Arnauld de Nadaillac. 2003. The definition of competencies (online). SEARCHING: <http://competency.rmutp.ac.th>
- [2] Boyatzis. 1982. Competent manager: a model for effective performance. New York. John Wiley & Sons.
- [3] Boam and Sparrow. 1992. The rise and rationale of competency-based approaches. In Boam and Sparrow (Eds.). Designing and achieving competency. London: McGraw-Hill.
- [4] David C. McClelland. 1970. Testing for Competency Rather Than for Intelligence
- [5] David D. Dubois, William J. Rothwell. 2004. The definition of competencies (online). SEARCHING: <http://competency.rmutp.ac.th>
- [6] HAY Group. 2547. The definition of competencies (online). Searching: <http://competency.rmutp.ac.th>
- [7] Spencer and Spencer. 1993. Competence at work: Models for superior performance. New York: Wiley.