49

# WORK EFFICIENCY OF TEACHERS AT ANYANG INSTITUTE OF TECHNOLOGY ประสิทธิภาพการทำงานของครูที่สถาบันเทคโนโลยีนันยาง

Qin Xiaohan ฉิน เสี่ยวหาน

Faculty of Education, Bangkokthonburi University คณะศึกษาศาสตร์ มหาวิทยาลัยกรุงเทพธนบุรี e-mail: 1185957740@qq.com

> Received: June, 7 2022 Revised: July, 5 2022

> > Accepted: July, 11 2022

### **ABSTRACT**

The objectives of this research were: 1) to study the level of work efficiency of teachers at the Anyang Institute of Technology according to personal factors and work factors; 2) to study the relationship among factors that affected their work efficiency. This research was a survey research. The population was 175 teachers from the Anyang Institute of Technology. The sample was 122 teachers and was selected by simple random sampling, using the Krejcie & Morgan's sample size determination table. The instrument used to collect the data was a questionnaire with a reliability of 0.92. The statistics used for data analysis were frequency, percentage, mean, Standard Deviation, t-test, F-test, and Multiple Regression with a stepwise method to study the relationship between factors that affect teacher work efficiency.

The result revealed that: 1) the work efficiency of teachers in overall view was at a high level. When considering each aspect, the freedom to express opinions on work had the highest mean, followed by relationships with colleagues, and the lowest mean was the career opportunities; 2) five variables affected work efficiency, were, career opportunities, love and pride in the profession, relationship with colleagues, freedom to express opinions on work, and a satisfactory return. Therefore,  $R^2$ =96.0%, which was significant at the 0.01 level ( $R^2$  = 0.96) and had a correlation coefficient. (Correlation) 0.98 (R = 0.98), which made hypothesis testing, at least one variable affected the efficiency of teachers. The results of the analysis of the correlation of the data by using multiple regression showed that the variables of career opportunities, love and pride in the profession, relationship with

colleagues, freedom to express opinions on work, a satisfactory return had positively affected the dependent variables and can jointly explain the variance of dependent variables by 96%, with career opportunities having the most significant effect on the dependent variables followed by love and pride in the profession, relationship with colleagues, freedom to express opinions on work, and a satisfactory return, respectively.

Keywords: Work Efficiency, Anyang Institute

# บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาระดับประสิทธิภาพในการทำงานของอาจารย์สถาบัน เทคโนโลยีนันยางตามปัจจัยส่วนบุคคลและปัจจัยการทำงาน และ 2) ศึกษาความสัมพันธ์ระหว่างปัจจัยที่ ส่งผลต่อประสิทธิภาพในการทำงาน การวิจัยครั้งนี้เป็นการวิจัยเชิงสำรวจ ประชากรคือ อาจารย์ 175 คน จากสถาบันเทคโนโลยีนันยาง กลุ่มตัวอย่างคือ ครู 122 คน และเลือกโดยการสุ่มอย่างง่าย โดยใช้ตาราง กำหนดขนาดตัวอย่างของ Krejcie & Morgan เครื่องมือที่ใช้ในการเก็บรวบรวมข้อมูลเป็นแบบสอบถามมี ค่าความเที่ยงเท่ากับ 0.92 สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบน มาตรฐาน การทดสอบค่า t การทดสอบค่า F และการถดถอยพหุคูณด้วยวิธีขั้นตอนเพื่อศึกษาความสัมพันธ์ ระหว่างปัจจัยที่ส่งผลต่อประสิทธิภาพการทำงานของครู

ผลการวิจัยพบว่า 1) ประสิทธิภาพการทำงานของครูในภาพรวมอยู่ในระดับมาก เมื่อพิจารณาเป็น รายด้าน อิสระในการแสดงความคิดเห็นในการทำงานมีค่าเฉลี่ยสูงสุด รองลงมาคือ ความสัมพันธ์กับเพื่อน ร่วมงาน และค่าเฉลี่ยต่ำสุดคือโอกาสในการทำงาน 2) 5 ตัวแปรที่ส่งผลต่อประสิทธิภาพการทำงาน ได้แก่ โอกาสในการทำงาน ความรักและความภาคภูมิใจในอาชีพ ความสัมพันธ์กับเพื่อนร่วมงาน เสรีภาพในการ แสดงความคิดเห็นในการทำงาน และผลตอบแทนที่น่าพอใจ ดังนั้น R²=96.0% ซึ่งมีนัยสำคัญที่ระดับ 0.01 (R²= 0.96) และมีค่าสัมประสิทธิ์สหสัมพันธ์ (ค่าสหสัมพันธ์) 0.98 (R= 0.98) ซึ่งทำการทดสอบสมมติฐาน อย่างน้อย 1 ตัวแปรที่มีผลต่อประสิทธิภาพของครู ผลการวิเคราะห์ความสัมพันธ์ของข้อมูลโดยใช้การ ถดถอยพหุคูณ พบว่า ตัวแปรโอกาสทางอาชีพ ความรัก ความภาคภูมิใจในอาชีพ ความสัมพันธ์กับเพื่อน ร่วมงาน เสรีภาพในการแสดงความคิดเห็นในการทำงาน ผลตอบแทนที่น่าพอใจ ส่งผลบวกต่อตัวแปรตาม และสามารถร่วมกันอธิบายความแปรปรวนของตัวแปรตามได้ร้อยละ 96 โดยโอกาสในการทำงานมีผลต่อ ตัวแปรตามมากที่สุด รองลงมาคือ ความรักและความภาคภูมิใจในอาชีพ ความสัมพันธ์กับเพื่อนร่วมงาน อิสระในการแสดงความคิดเห็นในการทำงาน และผลตอบแทนที่น่าพอใจ ตามสัมพันธ์กับเพื่อนร่วมงาน อิสระในการแสดงความคิดเห็นในการทำงาน และผลตอบแทนที่น่าพอใจ ตามสัมพันธ์กับเพื่อนร่วมงาน อิสระในการแสดงความคิดเห็นในการทำงาน และผลตอบแทนที่น่าพอใจ ตามลักดับ

คำสำคัญ: ประสิทธิภาพการทำงาน, สถาบันนั้นยาง

#### Introduction

In the era of globalization, with the continuous change of communication technology, the mutual transfer of economic conditions and information. Fast and fast change itself is a powerful driving force. Every country should be aware of the importance of change. Sustainable development is preparation for change. The direction of national development must adapt to changes-common development in many areas, such as society, organization, sustainable development, or adequate economy. Technological change and management modernity, and ultimately human development, are in many aspects of development. Human development is the beginning of development because everyone is the most important, learning and self-development. Therefore, people are the most important factor and the result of development. Therefore, all societies attach importance to people's quality and ability to develop themselves and society, including the country. To succeed, one must start from childhood. Children are the future of the country.

Teachers, whose main responsibilities are teaching and learning, promote learners' learning. In addition, the Ministry of education should promote teacher development, quality, and standard of education personnel. This study shows that schools or educational institutions should be properly guided and coordinated to enhance the ability of teachers and educators. Teachers are essential to teaching management.

Relevant information is provided by Baidu Academic. On the other hand, teaching in every school cannot continue. Therefore, the efficiency and efficiency of teaching management is reduced. In addition, the reduction of teachers' work efficiency is caused by many factors, except for two conclusions. This is a factor. I think personal factors include gender, age, education level, marital status, income and teaching experience. Second, students' level, teachers' teaching, and working factors are the opportunities for work. Relationship with colleagues, love and pride, freedom of opinion on work.

The results of this study will directly affect students' learning process, the potential of school education management in the field of education management, and the importance of the work efficiency of teachers and educators.

This study aims to explore the efficiency and effectiveness of teaching management so that the development of students becomes more excellent. In addition, the purpose of this study is to study the factors that affect teachers' work efficiency. In

this study, managers can use this information to solve management problems. From the results of independent research, it is found that these factors are caused by the school's management, which may affect the morale of teachers and the future of the school. The results show that the teaching management is effective.

# Research Objectives

- 1. To study teachers' demographic variables at the Anyang Institute of Technology in Henan province.
- 2. To study the work efficiency of teachers at the Anyang Institute of Technology. Compare work efficiency according to personal factors.
- 3. To study the relationship that affects the work efficiency of teachers at the Anyang Institute of Technology.

# Research Hypothesis

At least one variable affects the work efficiency of teachers in Anyang Institute of Technology.

### Conceptual Framework

To improve the quality of teaching, this paper studies the factors that affect the efficiency of teachers. In this study, it can be summarized as a conceptual framework. The relationship between independent variables and dependent variables as follows.

# Independent Variables Factors affecting efficiency 1) Career Opportunities 2) Love and pride in the profession 3) Relationship with colleagues 4) Freedom to express opinions on work 5) Satisfactory return Dependent Variables The work efficiency of teachers at Anyang Institute of Technology such as: 1) Diligent 2) Sense of responsibility and work enthusiasm 3) Loyalty to school

Figure 1: Conceptual framework

# Research Methodology

The study population was 175 teachers from the Anyang Institute of Technology. The sample was 122 teachers and was selected by simple random sampling, using the Krejcie and Morgan method. Use the computer program to analyze the data. Use frequency, percentage, mean, standard deviation to investigate, and use simple correlation analysis and stepwise multiple regression analysis to study the relationship between factors that affect teacher work efficiency.

Independent variables were work factors, career opportunities, love and pride in the profession, relationship with colleagues, freedom to express opinions on work, satisfactory return. The dependent variables of work efficiency are diligence, sense of responsibility and work enthusiasm, and loyalty to school.

The instrument used to collect data was a questionnaire. The first part was about the investigation of personal factors. It was a general information composed of gender, age, place of residence, marital status and income adequacy. The purpose of this study was to explore the factors that affect job performance and work efficiency. It's a matter of magnitude; all five levels define the performance level, meaning: 5 indicates the highest efficient, 4 indicates a high efficiency, 3 indicates a moderate efficiency, 2 indicates a low efficiency, 1 indicates the lowest efficiency.

The data obtained are analyzed by percentage, mean, standard deviation and simple correlation.

### Research Results

**Table 1:** These show the level of work factor in the overall view

Factors officiency	Work efficiency			
Factors affecting efficiency		S.D.	Translate	
1. Career Opportunities	3.23	0.55	Moderate	
2. Love and pride in the profession	3.36	0.57	Moderate	
3. Relationship with colleagues	3.75	0.28	High	
4. Freedom to express opinions on work	3.77	0.21	High	
5. Satisfactory return	3.68	0.32	High	
Total	3.55	0.27	High	

Table 1 shows the work factors are divided into five items. The overall 3.55, and the standard deviation is 0.27. Looking at each item separately, "freedom to express opinions on work" has the highest mean, with an average of 3.77 and a standard deviation of 0.21. "Career opportunity" has the lowest mean, with an average of 3.23 and a standard deviation of 0.55.

Table 2: Stepwise Multiple Regressions

Variables studied	t	В	S.E.	Beta	F	R <sup>2</sup> adjusted	
Work efficiency	(a) 1.174		0.227				
1. Career Opportunities	3.90**	0.119	0.031	0.158	499.65	0.96	
2. Love and pride in the profession	25.25**	0.191	0.043	0.097			
3. Relationship with colleagues	4.49**	0.067	0.019	0.070			
4. Freedom to express opinions on work	-9.41**	0.118	0.042	0.056			
5. Satisfactory return	2.82**	-0.304	0.032	-0.232			
$R = 0.98  R^2 = 0.96$							

<sup>\*\*</sup> Significant at the 0.01 level

Table 2 shows that five variables affect work efficiency, Career opportunities. Love and pride in the profession, Relationship with colleagues, Freedom to express, and satisfaction in return.  $R^2$ =96.0% is significant at the 0.01 level (R2=0.96) and has a correlation coefficient. (Correlation) 0.98 (R=0.98), which makes hypothesis testing, at least one variable affects the efficiency of teachers.

- X<sup>1</sup> Career opportunity
- X<sup>2</sup> Love and pride in the profession
- X<sup>3</sup> Relationship with colleagues
- X<sup>4</sup> Freedom to express opinions on work
- X<sup>5</sup> Satisfactory return

The results of the analysis of the correlation of the data by using multiple regression showed that the variables  $X^1$ ,  $X^2$ ,  $X^3$ ,  $X^4$ ,  $X^5$  it positively affects the variable Y and can jointly explain the variance of y by 96%, with  $X^1$  having the greatest effect on the variable y followed by  $X^2$ ,  $X^3$ ,  $X^4$ , and  $X^5$  respectively the equation can be written as follows:

$$Y = 0.158(X^{1}) + 0.097(X^{2}) + 0.070(X^{3}) + 0.056(X^{4}) - 0.232(X^{5})$$

### Discussion of Research Results

The results of independent research can be discussed based on hypotheses, and classified according to personal factors and work factors, and it was found that the school had a higher level of work efficiency. Responsibility and attention to work had a high level of work efficiency, which was consistent with the research of Natthan Thanadrob (2002, Abstract page).

Through stepwise multiple regression analysis, the results show that there were five variables that affect work efficiency. Career opportunities, love and pride in the profession, relationship with colleagues, freedom to express opinions on work and satisfactory return. Career opportunities had a high impact. Love and pride in the profession had a high impact. Relationship with colleagues had a medium effect. Freedom to express little impact. R2-0.96 and the statistical significance level was 0.01, which makes the answer of the hypothesis test that at least one variable was affected, which was consistent with the hypothesis.

# Suggestion

- 1. Schools should praise teachers for their sense of responsibility. Encourage teachers to work hard. In the case of students having problems, parents were allowed to criticize and cultivate the students' awareness of studying hard.
- 2. Improve the quality of teaching. In the work, guide teachers and colleagues to get along with each other and encourage each other. Encourage teachers to actively express their opinions at work,
- 3. Improve the efficiency of teachers by focusing. Improve teachers' enthusiasm and satisfaction with their work. Promote fair and systematic positions, and support and encourage teachers to have opportunities for promotion. Encourage teachers to accept each other's opinions at work.

### References

- Boonchuay Chaimuangchuen (2005). The satisfaction of the administrators of the rehabilitated educational institutes in Lampang Province towards the external quality assessment. Master of Education Thesis. Lampang Rajabhat University.
- Chonsit Pruitphithak. (2003). Factors related to job satisfaction of Kasetsart University personnel Kamphaeng Saen Campus Nakhon Pathom Province. Thesis, Master of Education Department of Educational Administration. Bangkok:

  Kasetsart University.
- Dares Chooyok. (2006). Efficiency in work. Sarn Samphan Sub-District Team: A Case Study, Yala Province. (Social Development). Bangkok: Faculty of Social and Environmental Development, National Institute of Development Administration.
- Ministry of Education. (2002). Handbook of learning management. Art learning subject group. Bangkok: Shipping and Parcel Organization Printing House (Delivery and Package Organization): Author.(2545). The National Education Act of 1999 and its amendments (No. 2), B.E. 2545 and the Compulsory Education Act, B.E.