

# A structural Equation Modeling of Factors Influencing Effectiveness of English Program Schools in the Northeast Thailand

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## ABSTRACT

**Keywords:**  
*Relationship Model;  
Structural Equation;  
Factors; English;  
School; Thailand;*

The purposes of this research were 1) study the effectiveness level of the English Program schools in the northeast and the factors level influencing effectiveness of the English Program schools in the northeast 2) investigate in the relation between structural equation model of factors influencing the effectiveness of the English Program schools in the northeast and 3) study of direct and indirect and total effects factor of influencing the effectiveness of the English Program schools in the northeast. The samples were 544 directors and the head of English Program schools in the northeast, selected by simple random. The research instrument for data collection was a 5 level rating scales questionnaire about the effectiveness level of the English Program schools in the northeast and the factors level influencing the effectiveness of the English Program schools in the northeast. Validity was 0.957, the data were analyzed to obtain the mean, standard deviation, and Pearson's product-moment correlation coefficient. LISREL applied for skewness, kurtosis, and

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confirmatory factors and examined the relationship between the hypothesis model and the empirical data.

The research findings were as follows:

1) the effectiveness level of the English Program schools in the northeast and the factors level influencing effectiveness of the English Program schools in the northeast, the average is at the highest level. 2) The model of the factors of the operational effectiveness of English Program schools in the northeast was valid and consistent with the empirical data. The model indicated the Chi-square consistency was 57.79,  $df = 43$ ,  $p = 0.06$ ,  $GFI = 0.99$ ,  $AGFI = 0.96$ ,  $RMSEA = 0.025$ ,  $SRMR = 0.012$ ,  $CN = 631.57$  3) the factors affecting quality of English Program schools in the northeast consisted of: 1) 4 factors of direct effect: Teaching Behavior of Teachers, Leadership, School Climate and Parent Participation. 2) 3 indirect factors: Teaching Behavior of Teachers, School Climate, and Leadership. And 3) 4 total factors: Teaching Behavior of Teachers, Leadership, School Climate, and Parent Participation.

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## INTRODUCTION

The teaching and learning project under the Ministry of Education in English Called the English Program, it called “the EP project”. In 1995, a bilingual school was launched. (The name used in those days), with 3 private schools proposing to proceed and has been approved to use teaching materials in English, namely Sarasan Kaset Ektra School, Higher Education School, and how the Bangkok Christian School managed the English Program successfully. Journal of Education Prince of Songkla University, Pattani Campus, Year 23, Issue 3, Sep-Dec 2011. Later, the government school first started operating in the academic year 1998, with the Yothin Burana School and the Crown Prince School. Is a public pilot school that operates under the Ministry of Education in English in all courses? Except for the Thai language and subjects in the social studies section on the subject of Thailand, Thai culture, Buddhism and Thai law, it is taught in Thai (Sutthipong Yongkamol, 2000: 12-14). The program provides teaching and learning according to the Basic Education

Curriculum 2001 and the Core Curriculum. 2008 by teaching and learning all subjects in English. Except for Thai language and social studies related to Thai culture. (Office of Academic Affairs and Educational Standards, 2009: 9).

As a result of this policy, many schools are launching the EP program in management. The English Program is a self-management, which is like a small school education in the oversight of a large school. Liaison among many parties is therefore very important for the operation of the project. Proceed smoothly providing the opportunity for people to choose to send their children to study in this project is considered good and appropriate policy. But the thing that should be considered very much is Project management Due to the reason that Project management providing effective English language education program (EP) in the Ministry of Education, administrators must have the potential to analyze news and information. As well as developing people in the department and know how to use resources in many areas more than ordinary schools (Suthipong Yongkamol, 2000: 276-277) because the nature of education in a bilingual system is different from education in the ordinary system. Very general

Therefore, the policy of the project management in the English Program together with the researcher as the project management of the teaching and learning program in the Ministry of Education in English (English Program) makes the researchers interested to study what factors. To make the school that teaches according to the Ministry of Education in English Effective according to the targeted curriculum and how do these factors influence the effectiveness of the schools that are teaching and learning according to the Ministry of Education in English Program, as well as from research studies? No research has been conducted focusing on the said project. The information from this research will be useful. For the administration of the English Program in schools and the development of students in the teacher program as well as the school administrators. Which will make the school to meet the quality of the curriculum standards.

### **RESEARCH OBJECTIVES**

1. To study the level of school effectiveness and factors affecting the effectiveness

Of schools that provide instruction in English In the northeast

2. To check the harmonization of the causal relationship model of factors

Influencing the effectiveness of schools that are teaching and learning in English. In the Northeast region with empirical data

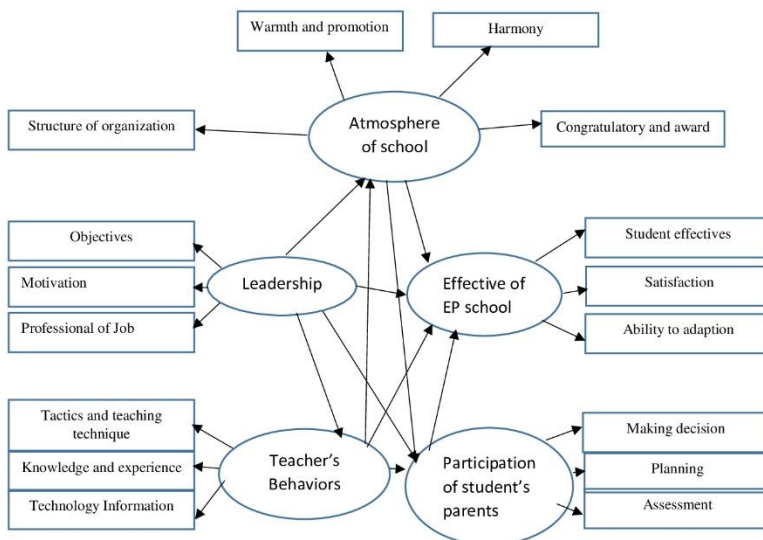
3. To study direct influence indirect influence and the combined influence of the influencing factors on the effectiveness of schools that are teaching and learning in English In the northeast

### **METHOD OF RESEARCH**

This research is quantitative. (Quantitative Research) has the following research methods

1. A conceptual framework for research the researcher synthesized the effectiveness factors of the schools that provided education.

Teaching in English In the northeast Study from documents Textbooks and related research, with 4 observable variables which are 1) students' impact 2) teachers' job satisfaction 3) teachers' adaptability 4) student characteristics And the influencing factors which the researcher has synthesized can select 4 factors which are 1) leadership 2) school atmosphere 3) parents' participation and 4) teacher teaching behavior as in picture 1.



Picture 1 Research conceptual framework

From the research, it is found that leadership (LE) influences the - effectiveness of schools that teach in English (ES) and all other factors. And having the most influence on teacher teaching behavior (TB), followed by the effectiveness of schools that teach in English (ES), school atmosphere (SC), and parents' participation (PP), respectively. Office of the Basic Education Commission Ministry of Education Who is responsible for determining the operational guidelines to manage education by the Teaching and Learning Program under the Ministry of Education in English (English Program / Mini English Program) must develop the teaching behavior of teachers. And attach importance to leadership development, school atmosphere and the participation of parents at the same time will result in the school to be more efficient and effective.

## RESEARCH FINDINGS

The results of the research can be summarized as follows:

1. The results of the analysis of the basic data of the sample group found that most of the respondents were 352 female, 64.71% and 192 male, 35.29%, most were 31-40 years old. 156 people, representing 28.68%, have the highest degree of master degree, totaling 302 people, 55.51%, most of the 222 teaching experience 6-15 years, accounting for 40.81%

2. The results of the analysis of the basic statistics of latent variables and observed variables showed that

2.1 The basic statistics of observable variables of school quality have an average value ( $\bar{x}$ ) between 4.69 - 4.72, standard deviation (S.D.) between 0.30 - 0.35 and factors affecting the effectiveness of schools that are teaching English In the northeastern region, the mean ( $\bar{x}$ ) is between 4.68 - 4.74. The standard deviation (S.D.) is between 0.30 - 0.39.

2.2 The distribution coefficient (C.V.) of 6.25 - 8.39 percent has a skew (SK) negative and a high (KU) is both positive, indicating that the answer to the question is high. The skewness and the overwhelming value are near zero. Show that each factor score has a normal curve distribution

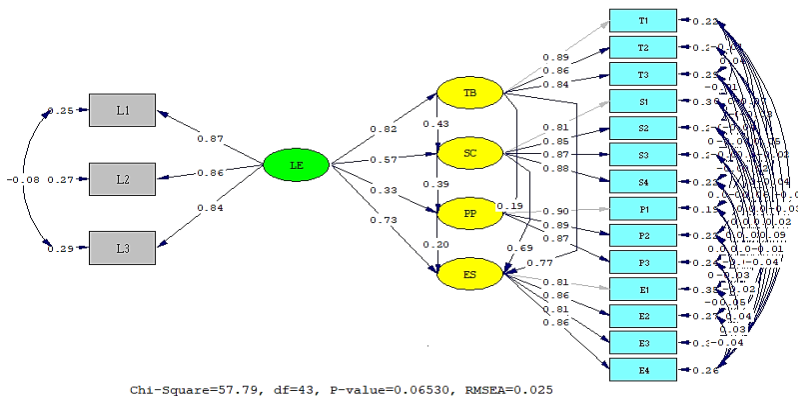
2.3 Between variables, it was observed that 136 pairs of variables had a positive relationship statistically significant at the 0.01 level. When considering Bartlett's Test of Sphericity to check the relationship between the variables equal to 8859.140 ( $p < 0.000$ ) shows that Correlation matrices between variables differ significantly from identity matrices, meaning that all 17 variables are related.

3. School quality level and the level of factors that influence school quality

It was found that the effectiveness level of schools that teach in English (ES), in general, has the highest mean ( $= 4.71$ ). When considering each variable, it is found that every variable has the highest mean. The variable which has the highest mean is teacher satisfaction. And the ability to adapt ( $= 4.72$ ) equally, followed by the effect on students ( $= 4.70$ ) and the variable with the lowest mean was the characteristics of students ( $= 4.69$ ) respectively.

It is found that the level of factors that influence the effectiveness of the schools that are teaching and learning in English In the northeastern region, the overall picture has the highest mean value ( $= 4.71$ ). When considering each variable, it is found that every variable has the highest mean. The variable with the highest mean was teacher teaching behavior (TB) ( $= 4.73$ ), followed by leadership (LE) and school atmosphere (SC) ( $= 4.71$ ). The lowest mean is the participation of parents (PP) ( $= 4.69$ ).

4. The result of checking the consistency, linear relationship model of factors affecting the effectiveness of schools that are teaching and



learning in English. In the northeast Consistency in consistency with empirical data, with = 57.79, df = 43, p = 0.06, GFI = 0.99, AGFI = 0.96, RMSEA = 0.025, SRMR = 0.012, CN = 631.57 (Suphamat Angsuehot et al., 2008) As picture 2

Picture 2 the relationship between the linear structure of the factors affecting school effectiveness that is teaching and learning in English

5. Results of direct influence studies Indirect and overall factors influencing the effectiveness of schools that are teaching English In the northeastern region, it was found that 1) there were 4 direct factors which were teacher teaching behavior, leadership, school atmosphere. And the participation of parents has the same coefficient of influence 0.77, 0.73, 0.69 and 0.20 respectively. 2) Indirect influences there are 3 factors, namely the teacher teaching behavior has an indirect influence through the school atmosphere. And the participation of parents School atmosphere factors has indirect influence through the participation of parents the leadership factor there are indirect influences on teacher teaching behavior. School atmosphere and the participation of parents which the coefficient of influence is equal to 0.21, 0.18 and 0.16 respectively. 3) The total influence has 4 factors which are teaching behavior of teachers, leadership, and school atmosphere. And the participation of parents has the same coefficient of influence 0.98, 0.89, 0.87 and 0.20, respectively. When considering the prediction coefficient (R<sup>2</sup>), it is found that all the factors studied in the model can jointly explain the variability of the effectiveness of the schools that are teaching and learning in English. In the northeast region, 94 percent

## DISCUSSION

1. The results of the analysis of the level of effectiveness of schools that are teaching and learning in English. In the northeast In

general, the average is at the highest level. The variable with the highest mean was teacher satisfaction. And the ability to adapt the teacher equally, followed by the effect on the students and the characteristics of the students, respectively. This may be because the teacher is an important person in providing education, learning, promoting, and encouraging learners to have better results. Teachers are therefore the most important factor of quality education. Teaching quality is a factor that influences learning outcomes by the basic education curriculum standards, consistent with the Secretariat of the Council of Education (2009: 18), which found that important factors affecting student learning change At the school level, there are 3 aspects which are a teacher teaching quality School teaching improvement And organizing and setting goals In which these 3 factors are the most important factors Without these three issues, student reform that will lead to quality will never be successful. Also consistent with Narumon Charoenpornsakun (2016: 1) researched Factors that affect school effectiveness Under the Office of the Private Education Commission, found that teachers Which has a great influence on school effectiveness of primary schools under the Office of the Private Education Commission, including the characteristics of teachers Job satisfaction of teachers and quality of teaching and learning of teachers With details as follows Characteristics of teachers that influence the effectiveness Of primary schools under the Office of the Private Education Commission, namely working age, the educational background that corresponds to the discipline taught And have the expertise, experience, and expertise in the program. Assigned teacher qualifications it was found that educational background influenced the satisfaction of teachers with higher educational background. More work the satisfaction of teachers' work means the feeling of the personnel who are satisfied with the whole job as a whole and the emotions that affect the work of personnel both the positive or negative aspects that each person has for their work. It is an emotion that will respond to work on duty. Including physical and social conditions that reflect the success of school operations, including satisfaction in the work environment. Acceptance of colleagues the trust of supervisors Salary and compensation received and the advancement in the teaching profession teaching behavior of teachers means student-centered management process. In the balance of learning and contribute to sustainable development for good living in society. There are 5 characteristics which are 1) good planning 2) good management 3) able to adjust as appropriate 4) have creative initiatives 5) There are educational innovations it also corresponds to Greenberg and Baron (Greenberg & Baron, 1997: 4). "Satisfaction is a reaction to evaluating emotional thinking in work. Job satisfaction characteristics consist of job satisfaction components in each area. May be consistent or different, such as people may be satisfied with the compensation received from work. But not satisfied with the supervisor and colleagues the job satisfaction status of the person is quite stable. According to the work experience and the expectations of the people and Suwit Mesin Tree (2010: 180) saw that social adjustment is an

important issue to help promote learning about appropriate social behavior. It helps people to adapt to the situation and live happily in society. Which will result in students gaining experience from the teaching and learning process of the teacher as well as the result of the teaching and learning process that will cause students to change behavior this includes the achievement of students that are increasing continuously.

2. Levels of factors that influence the effectiveness of schools that are teaching and learning in English In the northeast the order of the influencing factors from the highest to the lowest in the teaching behavior of the teachers, followed by the leadership and the school atmosphere equally, and the lowest mean factor is the parents' participation. This may be due to the teaching behavior of teachers that is important for the effectiveness of the school. How high or low academic achievement will the student depend on the teaching method or the teaching behavior that the teacher is performing? By Rungkaew Dang (2010: 31), mentioned the importance of teacher teaching behavior that How high or low academic achievement will the student depend on the teaching method or the teaching behavior that the teacher is performing in? Because teachers have a direct role in ensuring the quality of learning of the learners so that the learners meet the quality of education standards. For this reason, teaching behavior is like a teaching reform of teachers as well. Because teachers have to work systematically and in a process of self-assessment And self-evaluation report In which teachers must be able to define their work processes By studying the curriculum to understand There is a teaching plan to apply the research process in the class. Conduct teaching by allowing students to participate. Evaluate students' actual assessments and evaluate their teaching for analysis and improvement of teaching. And recording the results of every teaching. According to Chitraphong Pongmalee (2007: 52), teaching behavior refers to the teacher's actions or expressions while teaching related to teaching activities that promote learning. Known for students to practice thinking. Practicing and practicing to improve themselves by organizing group activities using questions to stimulate and reinforce curiosity using a variety of learning resources and teaching materials with a focus on learners linking experiences with life to practice thinking, integrated problem-solving. Seeking and finding the knowledge by oneself Observing and evaluating student development is consistent with Clicksank and Bainer (Cruickshank & Bainer, 1999: 307-321). Has the following characteristics of behavior: enthusiastic, humorous, and warm when approaching Reliable There is a strong commitment to success. Knowing to support students to be satisfied. Work like a businessman Flexible and is knowledgeable in the teaching field.

The result of checking the consistency of the model, the factors that influence the effectiveness of the schools that are teaching and learning in English. In the northeast with the empirical data, it was found that the values were = 57.79, df = 43, p = 0.06, GFI = 0.99, AGFI = 0.96,



RMSEA = 0.025, SRMR = 0.012, CN = 631.57. Have shown that the model of the hypothesis, factors that influence the effectiveness of schools that are teaching and learning in English Consistency in harmony with empirical data Which indexes are used to check consistency Or the harmonization of the model and the empirical data, namely Chi-Square Statistics, considering the / df value which should be less than 2.00, the square root of the mean square error of the estimation ( Root Mean Square Error of Approximation (RMSEA) should be less than 0.05. An Absolute fit index consisting of GFI (Goodness of Fit) should be greater than 0.90. AGFI (Adjusted Goodness of Fit) should be greater than 0.90. PGFI (Parsimony Goodness of Fit) should have a low value of 0.50 or higher. Relative Fit Index (NFI (Normed Fit Index) should be 0.90 or higher. PNFI (Parsimony Normed Fit Index) should be low. CFI (Comparative Fit Index) should be 0.90 or higher. The Standardized RMR Consistency Index should be less than 0.05 and the sample size index will accept the Critical N Index. Is greater than 200 (Supamas Angsuchot et al., 2008)

3.1 Factors that have a direct influence on the effectiveness of schools that are teaching and learning in English. In the northeast, the order of the influence coefficients was the teaching behavior of teachers, leadership, and school atmosphere. The participation of parents has equal influence 0.77, 0.73, 0.69 and 0.20 respectively. This may be due to the teaching behavior of teachers that is important for the effectiveness of the school. How high or low student achievement will be depending on the method of teaching or the effective teaching behavior of the teacher. By Rungkaew Dang (2010: 31), mentioned the importance of teacher teaching behavior that How high or low student achievement will be depending on the method of teaching or the effective teaching behavior of the teacher. Because teachers have a direct role in ensuring the quality of learning of the learners so that the learners meet the quality of education standards. Clicks, Sons, and Bennes (Cruickshank & Bainer, 1999: 307-321), said that effective teachers have the following characteristics of behavior: enthusiastic, humorous, and warm when approaching Reliable There is a strong commitment to success. Knowing to support students to be satisfied. Work like a businessman Flexible and is knowledgeable in the teaching field

3.2 Factors that indirectly influence the effectiveness of schools that are teaching and learning in English In the northeast the order of the most influential coefficients is

3.2.1) Teaching behavior of teachers through the atmosphere of the school and the parents' participation has an influence equal to 0.21. This may be due to the teachers' teaching behavior that is important for the effectiveness of the school. How high or low student achievement will be depending on the method of teaching or the effective teaching behavior of the teacher. This is under Chitra Pongpamalee (2007: 52) said that teaching behavior refers to the actions or expressions of teachers while teaching related to teaching activities that promote learning for students to practice thinking. Practicing and practicing to improve themselves by

organizing group activities using questions to stimulate and reinforce curiosity using a variety of learning resources and teaching materials with a focus on learners

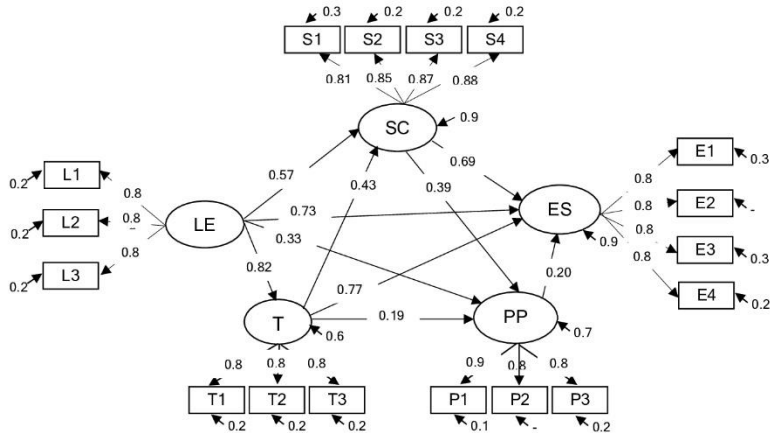
3.2.2) the school atmosphere has indirect influence through the participation of parents with the influence of 0.18. This may be because the school atmosphere it is another factor that is related to the management success of administrators and affects the success or effectiveness of the school. And the school atmosphere is another factor that is related to executive success and results in the success or effectiveness of the school (Hoy & Miskel, 2005; Fildler, 1976), consistent with the ideas of Quinn and Robert. Dobz (Quinn & Rohrbaugh, 1983: 363-377) concluded that the organization's atmosphere Influences organizational effectiveness and is consistent with (Hoy & Miskel, 2005; Fildler, 1976). Hoy & Miskel (2005: 84) view that the school's atmosphere refers to the unique characteristics of the school as a result of relationships. Between school administrators and school groups

3.2.3) Leadership indirectly influences through teacher teaching behavior School atmosphere And the participation of parents with the influence coefficient equal to 0.16. This may be because leadership is one of the duties of many executives. And executives must have the characteristics of leadership (Leadership) Leadership is very important and necessary for those who will hold the executive positions of the organization in line with Paitoon Sinlarat (2017: 10) said that leadership Means Behavior of executives with relationships or influences between leaders and followers To make changes to achieve common goals under the era (Yukl. 2006: 5) said that leadership refers to the ability of individuals to influence. Motivate and motivate other people to work for the organization to be successful.

3.3 Factors that influence the effectiveness of schools that are teaching and learning in English In the northeast the order of the influencing coefficients was the teaching behavior of teachers, leadership, school atmosphere. The participation of parents with the influence of 0.98, 0.89, 0.87, and 0.20 respectively. This may be due to Good teaching behavior of teachers Must create a school atmosphere to be ready Including supporting the participation of parents Which will result in the school being more effective Teaching behavioral factors of teachers who indirectly influence through the school atmosphere to school effectiveness. By Chusak Tin-Asa (2015: 164) researched on the linear structural relationship model of the factors that influence the school sports effectiveness. Of personnel and organizational resource management indirectly influenced through the organization's atmosphere of the school and the teaching behavior factors of teachers that indirectly influence the parents' participation to the school effectiveness by Naphakrit Samsa-ara (2019: 323) conducted research on The model for the causal relationship of factors affecting the effectiveness.

**New knowledge**

Research on this subject Gain new knowledge for school development as follows



Picture 3 the results of a causal relationship, a model of factors affecting the school effectiveness

From the research, it is found that leadership (LE) influences the effectiveness of schools that teach in English (ES) and all other factors. And having the most influence on teacher teaching behavior (TB), followed by the effectiveness of schools that teach in English (ES), school atmosphere (SC), and parents' participation (PP), respectively. Office of the Basic Education Commission Ministry of Education Who is responsible for determining the operational guidelines to manage education under the Teaching and Learning Program under the Ministry of Education in English (English Program / Mini English Program) must develop the teaching behavior of teachers. And attach importance to leadership development, school atmosphere and the participation of parents at the same time will result in the school to be more efficient and effective

**CONCLUSION AND SUGGESTION**

1. The level of effectiveness and the level of factors that influence the effectiveness of the schools that are teaching and learning in English. In the northeast In general, the highest mean values were the teacher satisfaction and the ability to adapt equally, followed by the effect on the students and the characteristics of the students respectively, and the level of influencing factors. On the effectiveness of schools that are teaching and learning in English In the northeast, The factor with the highest level of average is the teaching behavior of teachers, followed by the leadership and the school atmosphere equally, while the lowest mean is the participation of parents, respectively.

2. The result of checking the consistency of the model of factors affecting the effectiveness of schools that are teaching and learning in English In the northeastern region and the empirical data, it was found that the values were = 57.79,  $df = 43$ ,  $p = 0.06$ ,  $GFI = 0.99$ ,  $AGFI = 0.96$ ,  $RMSEA = 0.025$ ,  $SRMR = 0.012$ ,  $CN = 631.57$  which had the harmonized statistics. In the acceptable range, it was shown that the model of the hypothesis which factors influencing the effectiveness of the schools that are teaching and learning in English In the northeast Consistency in harmony with empirical data

3. Factors that influence the effectiveness of schools that are teaching and learning in English In the northeastern region, which is 1) the direct influence factors are the teaching behavior of teachers, leadership, school atmosphere, and parents' participation. 2) The indirect influencing factors were the teacher teaching behavior. School atmosphere and leadership 3) the factors that influenced on teaching behavior were teachers' leadership, school atmosphere. The participation of parents

#### 1. Suggestions for using research findings

1.1 The level of effectiveness of the school providing instruction in English In the northeast In general, the average is at the highest level. And every variable has the highest mean at the highest level. Therefore, the Office of Basic Education Commission Ministry of Education should pay attention to Teacher satisfaction And the ability to adapt, followed by leadership, while other variables Emphasize and promote simultaneously with all variables

1.3 Factors with direct influence Indirect and overall to the quality of schools is the most Teaching behaviors of teachers, leadership, school atmosphere. And the participation of parents respectively. Therefore, administrators should pay more attention to the development of teaching behavior of teachers to be more quality and promote all 4 factors as important factors that influence school quality concurrently

#### 2. Suggestions for further research

2.1 There should be qualitative research on other factors that influence the effectiveness of schools that are teaching and learning in English. In the northeast to develop models to be diverse

2.2 There should be research and development of innovations or forms to promote each factor to provide schools with clear guidelines for the operation of schools that provide instruction in English. In the northeast which will result in the administration of the school to be more quality under the context and the experimental results have been designed to confirm the development results of the developed model

2.3 There should be research on the linear structure relationship model of the factors that influence the effectiveness of the schools that are teaching and learning in English. In the northeastern region, for example, schools that provide English-language instruction in other regions to examine the importance of variables that are similar or different. So that the development is in line with the target group and the needs.

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