



## EARLY CHILDHOOD PUPILS' PERFORMANCES OF THEIR TRAINEE STUDENT TEACHER INTERNSHIPS TO THEIR IMPROVING CREATIVE THINKING AND PERFORMANCE ATTITUDE SKILLS

Prasong Saihong<sup>1</sup>, Toansakul Santiboon<sup>2i</sup>

<sup>1</sup>Curriculum and Instruction Department, Faculty of Education,  
Mahasarakham University, Maha Sarakham, Thailand, 44000

<sup>2</sup>Science Education Department, Faculty of Education,  
Rajabhat Mahasarakham University, Maha Sarakham, Thailand, 44000

### Abstract:

To investigate of pupils were observed and interviews of their early childhood classroom learning environments with the instructional internships in teaching early childhood of the pre-primary activity trainee student teacher internships for improving and creating scientific attitude skills toward early childhood in pre-primary educational school level in Thailand. Associations between these perceptions with their performances and pupils' attitudes toward early childhood performances were determined. Using the research instruments on classroom learning environments obtained of the 25-item *My Class Inventory* (MCI) and with the 8-item *Test Of Performance-Related Attitude* (TOPRA) were assessed which convention on individualized open and inquiry-based education, teacher-pupil interactions, and pupils' creating activity performances attitude skills were assessed with the volunteer staff with the observe and interview forms. The MCI questionnaire has an Actual Forms and a Preferred Form. The questionnaire was administered in three phases with the Custer Random Sampling technique to a sample consisted of 720 pupils in 30 early childhood classes from 30 schools at the pre-primary levels in Maha Sarakham Primary Educational Service Area Office 1-3 and Roi-Et Pre-Primary Educational Service Area Office 1-3. Statistically significant differences between pupils were observed and interviews of actual-1, actual-2 and preferred performance activity learning environments of their classroom climates, distinguish individualized classrooms with their improving and creating attitudes skills' sustainable development were also found.

---

<sup>i</sup> Correspondence: email [psaihong@gmail.com](mailto:psaihong@gmail.com), [toansakul35@yahoo.com](mailto:toansakul35@yahoo.com)

Predictions of the monitoring and evaluation of managing activity performances by the trainee student teachers of their internships; pupils' skills developments of their activity performances' sustainable for the set of actual and preferred environments as a whole and early childhood related attitudes also were correlated. The  $R^2$  values indicate that 57%, 72%, and 80% of the variances in pupils' attitudes to their actual-1, actual-2 and preferred for the MCI in early childhood classes were attributable to their performances of their actual-1, actual-2 and preferred environments and their developing creative activity performances skills' sustainable toward activity performance are provided.

**Keywords:** monitoring and evaluation, pre-primary of activity performances education, trainee student, internships in teaching activity performance, improving and creating, attitude skills' sustainable, development, activity performance, pre-primary pupils

## 1. Introduction

The standardizations' framework of the curriculum of Pre-primary of Education Program in Activity Performances Education, Faculty of Education, Mahasarakham University is personalized content which it followed as the Secretariat of the Teachers Council of Thailand onto published in the Royal Thai Government Gazette in the quality of graduate educational pupils who are trainees pupils and must be training professional learning participation on school practices, and teaching internship I and II in the two semesters in pre-primary educational schools in the academic year 2015. Most of trainee educational pupils who were going on their instructional administrations, completely whose were kept under their supervisors in fields of activity performance, biology, chemistry, and general activity performances were unstructured in their school classes.

Focusing on pre-primary early childhood trainee student teacher internships who must observed and collaborated in instructional planning for variety purposes of teaching, environment setting, teaching observation in situation or in school, supplementary activities for pupils; practices of dharma or voluntary activities organization, and developing of professional teacher; setting plans for learning management in order to learners construct knowledge by themselves, setting learning environment, practices on teaching in simulative and real situation, practices on teaching in school with expertise teachers and advisors collaborative; instruction; design the test or assessment tools, test scoring, performance test and grading; research for solving student's problems; study of academic works in schools, support system for academic affairs, system of instructional management, media, and learning sources;

schools' evaluation, and implementation in real situations on training professional learning participation on school practices.

In terms of Teaching Internship I and II, early childhood trainee student teacher internships were observed of the general status in school, practices on teaching major subject, practices of teacher's duties; in classroom administration, practices on other tasks as assigned, learner analysis, preparation of school curriculum, preparation of lesson plans, learning environment, selection of media and learning sources, construction of assessment tools, setting activities for learners development, learning measurement and evaluation and using these results for learner development, classroom management, testing, scoring, performances test, and grading with school teachers and advisors, evaluation, update, research for learner's development and solving learner's problems, study on school academic affair, academic support system, instruction system, media and learning resources, school's evaluation, and using to practice in real situations, setting project for school development in various parts, seminars on professional experience, discussion or sharing knowledge in educational seminar.

Monitoring and evaluation (M&E) is a process that helps improve performance and achieve results. Its goal is to improve current and future management of outputs, outcomes and impact. M&E establishes links between the past, present and future actions (United Nations Development Programme Evaluation Office, 2012). The M&E is, as its name indicates, separated into two distinguished categories: Evaluation and Monitoring, an evaluation is a systematic and objective examination concerning the relevance, effectiveness, efficiency and impact of activities in the light of specified objectives. According to the pre-primary trainee educational pupils in their instructional early childhood classroom climates class inventories, early childhood trainee student teachers interpersonal behaviours, and individualizations of pupils' outcomes were assessed.

This research study into supporting pupils' activity performances attitudes toward early childhood for sustainable development (SD) was conducted from the Pre-primary Education Program in Activity Performances Education. The researcher was designed on monitoring and evaluation for assessing pre-primary pupils' sustainable development contributes to advance policy recommendations of early childhood trainee educational students' instructional management to their instructional policy, early childhood classroom climates classroom climate change, measurement and assessment, and natural resources management in their classes. Designing instructional methods both formal and non-formal education from early childhood trainee student teacher

internships are indispensable to changing pre-primary pupils' attitudes so that they have the capacity to assess and address their sustainable development concerns.

The mainstay of the teacher output is provided by the government Higher Educational Commission Universities, the traditional teacher training colleges in most provinces. Programmes include courses in teaching methodology, school administration, special education, optional specializations, supervised practical teaching experience, and the general education subjects of language and communication, humanities, social science, mathematics, and technology. Primary teachers do not enjoy the same long breaks as the students and are required to work on administrative duties. Many of these tasks concern their familiarization with the frequent improvements to the National Curriculum; indeed, changes often occur faster than authors and publishers can update the textbooks and the teachers must improvise without support material, and have to design their own tests and exams - neither of which is conducive to an improvement in quality. The frequent changes in policy can cause confusion. Often one department of the Ministry of Education is not aware of the work of another and the principals and the teachers in the schools are always at the end of the information chain. Students are not encouraged to develop analytical and critical thinking skills, which are clearly demonstrated by their inability to complete a cloze test, or to grasp a notion through context. The teachers will avoid introducing dialogue into the classroom or eliciting response from the students - to give a wrong answer would be to lose face in the presence of one's peers, a situation that in Thai culture must always be avoided. Several thousand native-Thai Isaan speakers are employed in public and private schools throughout the Northeastern.

This is being encouraged by the need to develop students' oral expression and knowledge of central Thai culture; much of their time however, is taken up with remedial teaching: putting right any grammar, orthography, pronunciation and cultural background that has been wrongly taught and which leads to great misunderstanding - they see this as a greater priority. However, the student teaching internship represents the capstone or culminating experience at Mahasarakham University in the preparation of prospective teachers as knowledgeable, reflective practitioners and emerging leaders who conduct themselves ethically and professionally. The two semester-long internships provided student teachers many opportunities within diverse classroom settings to refine the knowledge, skills, and dispositions they have developed as active participants in the Mahasarakham University Teacher Preparation Program.

## **2. Methodology and Materials**

### **A. Previous Some Educational Instruments in Activity performances Classroom Learning Environments**

This research procedure was investigated of the previous research instruments in activity performances classroom environments for assessing classroom environment had been developed the 25-Short form of the *My Class Inventory* (MCI) assesses those dimensions which distinguish classrooms from convention (Santiboon, 2012). To assess the nature and quality of interpersonal relationships of pupils in activity performances classes was improved and developed in the USA (Wubbels & Levy 1993), Australia (Fisher, Henderson & Fraser 1995), Thailand (Santiboon and Fisher, 2005; Santiboon, 2013) were observed and interviews of their early childhood classes.

#### **a. Activity Performances Classroom Climates**

There has been continuous concern about the situation in educational laboratories among educators in Thailand (Kijkosol and Fisher, 2005; Santiboon, 2011, 2012, 2013, 2014; Santiboon and Fisher, 2005; Sitthikosol and Malone, 2008; Wanpen and Fisher, 2005). They reported that classroom climates activities are not effectively conducted in schools, which was against the recommendations from curriculum. It was also pointed that the situation in primary, pre-primary, and higher education systems were worst, which meant the least likely conducted classroom climates lessons. This study intended to extend this notion in order to obtain more comprehensive picture of early childhood classrooms within pre-primary educational level pupils at the 4 – 6 year level for the foundational early childhood curriculum which they have kept from early childhood trainee student teachers of the Pre-primary of Activity Performances Program, focusing on pupils were observed and interviews of their own laboratories in early childhood classroom climates.

#### **b. Actual and Preferred Forms of the MCI**

These research instruments, the actual (assesses the class as it actually is) and preferred (asks the pupils what they would prefer their class to be like - the ideal situation) forms which is different from other instruments which compare the personal and class version. Pre-primary pupils were selected the actual and the preferred learning environments in their early childhood classroom climates. The difference between the actual and the preferred learning environment could be used as information for trainee student teachers to choose the appropriate strategies to minimize the differences. Therefore, the using of the MCI could be used for school-based professional development and guiding to improve the effectiveness of early childhood classroom climates teaching to their monitoring and evaluation to their internships in instructional

early childhood for improving and creating attitude skills' sustainable development toward early childhood on pre-primary pupils.

## **B. Using the Activity Performances Educational Instruments in this Study**

### **a. The My Class Inventory (MCI)**

A psychometric study with more than 2,800 elementary- age students examined the reliability and factorial validity of the My Class Inventory-Short Form (MCI-SF). Factor analytic and structural equation modeling results suggested that the original measure is a less than satisfactory approach to appraise various dimensions of classroom climate. Researchers subsequently tested a revised version of the MCI-SF, showing that the 18-item measure with four scales (Cohesion, Competitiveness, Friction, and Satisfaction) was psychometrically sound. Implications for elementary school counseling programs and practices are discussed. Focusing on the research using the MCI in Thailand, Santiboon (2012) investigated students' perceptions of their school learning climates of the educational basic school compared to their perceptions of their actual school (My School) and preferred school (My Dream School) learning climates in *Udon Thani Primary Educational Service Area Office 1 – 4*. Associations between these perceptions and students' attitudes toward their school learning climates were also determined. The school climates relationships with their students enhancing the school learning climates' attitudes in the schools were assessed.

To recap, it has been suggested that the My School Inventory that adapted version from the My Class Inventory-Short Form (Fraser, 1982, 1989; Fraser and Fisher, 1986) is well suited for use in primary schools. The measure and its items are (a) written at a low reading level, (b) brief, (c) easily administered and hand scored, and (d) simple for children to answer. For the Thai respondents, the term students used in many items was changed to students. In addition, rather than using the MCI scale, the shorter format requires children to merely circle "yes" or "no" representing either "agreement" or "disagreement" with each item's content. The condensed format with 25 items, asks respondents about their perceptions of five different dimensions of their school (actual) and their dream school (preferred) environmental climates: Satisfaction (items 1, 6, 11, 16, 21), Friction (items 2, 7, 12, 17, 22), Competitiveness (items 3, 8, 13, 18, 23), Difficulty (items 4, 9, 14, 19, 24), and Cohesiveness (items 5, 10, 15, 20, 25). The underlying scale meanings might be best described as follows: Cohesiveness--the degree to which students understand, collaborate, and are friendly with one another; Friction--the extent of tension and conflict among students; Difficulty--the level of difficulty students have with the classroom work; Satisfaction--the extent to which students feel satisfied with or

like their class; and Competition--the perceived amount of classroom competition. Moreover, each scale score is a sum of the five items composing the scale.

The original of the MCI, twenty of 25 items are scored in this manner: "Yes" = 3 points, "No" = 1, and omitted or invalidly answered (e.g., student circles both "yes" and "no") items = 2. A score of "2" is figured into the total score for each scale and interpreted as if the student was "uncertain" about whether the statement was an accurate or inaccurate reflection of the actual school environment. In a sense, then, a "2" score can be viewed as if the student was conflicted about the specific question. The remaining five items are reverse-coded: 6, 9, 10, 16, and 24 (i.e., "No" = 3 and "Yes" = 1). Each scale has a total possible score of 15 points. There is no overall score for the whole test.

This research study was adapted from the original of the MCI; research team designed from pupils' responses of their performance activities whose the volunteers checked into the MCI form. The MCI has five scales with five items in each scale. This instrument uses a five-point response format (Almost never, Seldom, Sometimes, Often, and Very Often). Student volunteers are required to circle of pupils responses by their observation and interview alternatives on the questionnaire themselves. The instrument was statistically validated before it was used to measure the classroom environment of childhood classes in the previous study. In addition to the *Test of Performance-Related Attitudes* (TOPRA), this adapted version from the *Test of Science-Related Attitudes* (TOSRA) (Fraser, 1981a). The TOPRA questionnaire was selected to use with the aim of investigating any possible relationships with pupils' performances about their school climates in the basic education of school's environmental climates. The TOPRA consists of eight scales.

Using the standard learning environment instruments and adapted version of the 25-item My School Inventory (MSI), adapted from the original My Class Inventory (MCI) (Fisher and Fraser, 1998) was administrated. Students' attitudes were assessed with the Test of School-Related Attitudes (TOSRA). This questionnaire was translated into the Thai language and the school climates measured that can be used at the educational basic school was validated on a sample of 825 pupils in 40 primary schools at the grade 6<sup>th</sup> level in the office of the basic educational service Udon Thani throughout in 4 areas. Statistically significant differences were found between the students' perceptions of their schools and their dream school climates. Outcomes of this study indicate that the school climates were high on MCI factors such as Cohesiveness, Attentiveness, Expansion, Application, and Satisfaction. Associations between students' perceptions of their school climates with their attitudes to their schools also were found. The multiple correlations were significant for the Actual or My School Form of the MCI

and shows that for the TOSRA, 42% of the variance in student's attitude to their schools was attributable to their perceptions. To be provided in suggestions for comparing the dream and the actual schools with students' perceptions are the based on this finding.

#### **b. The Test of Performance-Related Attitude (TOPRA)**

The *Test of Performance-Related Attitude* (TOPRA) (Santiboon and Fisher, 2005) was adapted and validated from the original of the *Test of Science-Related Attitude* (TOSRA) (Fraser, 1981) was designed to measure and assess performance-related attitudes along eight dimensions.

#### **C. Steps on Assessing Pre-Primary Pupils were Observed and Interviews**

Because the two instruments selected for this study were the MCI and the TOPRA, one of the reasons for selecting these instruments. Researcher conducted a project on encouraging early childhood pupils, early childhood trainee teachers, and early childhood classroom climates to assess the environments of early childhood classrooms and to assess of trainee teachers' monitoring and evaluation to their internships in instructional early childhood for improving and creating attitude skills' sustainable development toward early childhood on pre-primary pupils' activities which they could be utilized in order to improve pupils' activity performances and outcomes. This project research was conducted with three phases with 720 pupils in 30 classes from 10 pre-primary schools in two semesters. Pupils were observed and interviews for the assessing with the Preferred Forms of the ICEQ, QTI, and PLEI questionnaires at the first phase in from July to August, the second phase would be conducted with the Actual-1 Forms in October to November, and the Actual-2 Forms were assessed in January to February. However, the TOPRA would be conducted for assessing pupils' attitudes in December. The results showed that there were associations between pupils were observed and interviews of the early childhood classroom learning environment as measured by the scales of the ICEQ, QTI, and PLEI to make it more suitable to the early childhood classroom climates.

#### **D. Sample**

The main study involved monitoring and evaluation to trainee educational pupils who have trained into 31-early childhood trainee student teachers of their internships in instructional early childhood for improving and creating attitude skills' sustainable development toward early childhood on pre-primary pupils. The four activity performances classroom environments' questionnaires were administered in three phases with the Custer Random Sampling technique to a sample consisted of 720 pupils in 30 early childhood classes from 10 schools at the pre-primary 4-6 year levels in the

Maha Sarakham Pre-Primary Educational Service Area Office 1-3 and Roi-Et Pre-Primary Educational Service Area Office 1-3. The setting up of the sample and the consequent collection of data were then able to proceed.

### **E. Data Analysis**

Quantitative data were obtained using the two questionnaires (MCI and TOPRA). Appropriate statistical procedures were selected to determine whether the Thai versions of these questionnaires are valid and reliable. These were those tests traditionally used with learning environment questionnaire: internal consistency reliability, and ability to differentiate between pupils in different classrooms. Simple and multiple correlation analyses were used with the actual and preferred versions. A *t*-test for correlated samples was used for each individual the MCI scales to investigate whether pupils have significant different perceptions of their actual and preferred classrooms. Associations between pre-primary pupils were observed and interviews of their early childhood classes and their activity performances attitudes toward early childhood were assessed with the Linear Regression analysis that it would be indicated in term of the Co-efficiency predictive value ( $R^2$ ) by volunteers were observed and interviewed for checked list. All data collected remained confidential and all respondents were volunteers and had given signed permission.

### **3. Research Aims**

1. To analyze the validity and reliability of the *My Class Inventory* (MCI), and the *Test of Performance-Related Attitude* (TOPRA) instruments for use in this study.
2. To compare between pre-primary pupils were observed and interviews of their actual 1, actual 2, and preferred individualized classroom climates environments to their performances in 30-pre-primary early childhood classes from 10 schools from the Maha Sarakham Pre-Primary Educational Service Area Office 1-3 and Roi-Et Pre-Primary Educational Service Area Office 1-3.
3. To associate between pupils were observed and interviews of their actual 1, actual 2, and preferred distinguish individualized early childhood classroom climates classes from instructional convention with the trainee educational students' interpersonal behaviours, and early childhood classroom environment inventories and their attitudes toward early childhood in pre-primary classes in the Maha Sarakham Pre-Primary Educational Service Area Office 1-3 and Roi-Et Pre-Primary Educational Service Area Office 1-3.

## 4. Results

### A. Validations of the MCI

Description of quantitative data of analyzing responses for pre-primary pupils' assessments is reported in Table 1 for the MCI. Internal consistency (Cronbach alpha coefficient) and the mean correlation of each scale with the other scales were obtained for the sample in this present study as indices of scale reliability and discriminant validity for the Actual 1, Actual 2 and Preferred Forms of the MCI, respectively.

The actual-1, actual-2 and preferred perceptions of 720 pre-primary pupils of their individualized participants' activities in early childhood classroom climates classes were measure with the MCI. The results given in Table 1 show the mean scores for each of the five MCI scales. As each scale has five items, which ranged from 17.23 to 18.74 and from 19.93 to 21.57 when using the actual-1 and actual-2 scores and from 22.21 to 23.42 when using the preferred scores. The average mean scores ( $\mu$ ) ranged from 3.45 to 3.73 and from 3.95 to 4.31 when using the actual-1 and actual-2 scores, and from 4.44 to 4.68 when using the preferred scores, respectively.

**Table 1:** Scale Means' Score, Means, Variance, Standard Deviations, Scale Internal Consistency (Cronbach Alpha Reliability) and Discriminant Validity (Mean Correlation of a scale with Other Scales) for Actual 1, Actual 2 and Preferred Forms for the MCI

Scale	Form	Means' score	Mean ( $\mu$ )	Variance	Std. ( $\sigma$ )	Cronbach alpha reliability	Discriminant validity
Satisfaction	Actual 1	17.72	3.34	8.53	2.92	0.73	0.74
	Actual II	20.21	4.04	7.77	3.04	0.78	0.79
	Preferred	23.22	4.74	7.43	3.89	0.84	0.83
Friction	Actual 1	17.23	3.45	7.98	3.01	0.77	0.73
	Actual II	20.01	4.00	7.77	4.57	0.83	0.78
	Preferred	22.89	4.58	5.82	7.81	0.88	0.82
Competitiveness	Actual 1	17.23	3.45	8.04	2.83	0.71	0.75
	Actual II	19.93	3.99	7.90	3.45	0.77	0.80
	Preferred	22.21	4.44	7.88	4.22	0.79	0.84
Difficulty	Actual 1	17.98	3.40	8.92	2.77	0.72	0.74
	Actual II	19.74	3.95	7.75	3.58	0.77	0.80
	Preferred	22.77	4.53	7.78	4.77	0.80	0.84
Cohesiveness	Actual 1	18.74	3.73	7.57	3.21	0.77	0.73
	Actual II	21.57	4.31	7.54	4.77	0.81	0.82
	Preferred	23.42	4.78	5.77	5.79	0.83	0.83

N = 720, \* $q < .05$ , \*\* $q < .01$ , \*\*\* $q < .001$

As reported in Table 1, the reliability coefficients for the different MCI scales ranged from 0.73 to 0.77 and ranged from 0.77 to 0.83 when using the Actual-1 and Actual-2 Forms and from 0.83 to 0.898 for the Preferred Form when using the individual pupil as the unit of analysis. The discriminant validity (Mean correlation of a scale with other scales) for Actual 1, Actual 2 and Preferred Forms for the MCI, the distinct nature of the scales also was checked with overlapping aspects of the early childhood classroom learning environment. On the whole, these results are acceptable although somewhat lower in value that obtained of actually than prefer performances.

The 25-item MCI was also subjected to a series of one-way analyses of variance. As shown in Table 2, the  $\eta^2$  statistic ranged from 0.20 to 0.49 for different scales. It was confirmed that each scale differentiated significantly ( $p < 0.05$ ) between pupils' performances in different classrooms.

From the analyses, the MCI has been found to be a reliable and valid instrument for assessing students' performances of their childhood classroom environment, and provides validation support for its use specifically in early childhood in the pre-primary education who sat with their instructional management with the trainee student teachers, in both its Actual and Preferred Forms. A successful evaluation of discriminant validity on each scale shows that a scale of the MCI is correlated with other scales designed to measure theoretically different four scales.

**Table 2:** Paired Sample Form of Mean Differences, t-test, and Ability to Differentiate between Classroom (ANOVA) for Actual 1, Actual 2 and Preferred Forms for the MCI

Scale	Paired sample forms	Mean differences	t-test	ANOVA ( $\eta^2$ )
Satisfaction	Actual II-Actual I	2.49	5.84**	0.31**
	Preferred-Actual I	5.50	9.85***	0.49***
	Preferred-Actual II	3.01	1.69*	0.24*
Friction	Actual II-Actual I	2.78	5.32**	0.36**
	Preferred-Actual I	5.66	8.89***	0.45***
	Preferred-Actual II	2.88	1.34*	0.25*
Competitiveness	Actual II-Actual I	2.70	4.79**	0.30**
	Preferred-Actual I	4.98	10.21***	0.41***
	Preferred-Actual II	2.28	2.22*	0.22*
Difficulty	Actual II-Actual I	1.76	5.55**	0.33**
	Preferred-Actual I	4.79	11.03***	0.43***
	Preferred-Actual II	3.03	2.28*	0.24*
Cohesiveness	Actual II-Actual I	2.83	4.69**	0.33**
	Preferred-Actual I	4.68	9.23***	0.40***
	Preferred-Actual II	1.85	2.21*	0.20*

N = 720, \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

## **B. Validation of the TOPRA**

To measure pre-primary pupils' attitudes towards early childhood classroom climates studies, using internal consistency reliability the TOPRA had a value of 0.84 which was considered satisfactory for further use in this study. The TOPRA consists of 8 items in 5-point Likert scale (Strongly agree, Agree, Undecided, Disagree, Strongly disagree).

## **C. Comparisons between Pre-Primary Pupils were Observed and Interviewed of their Actual-1, Actual-2, and Preferred Responses for the MCI**

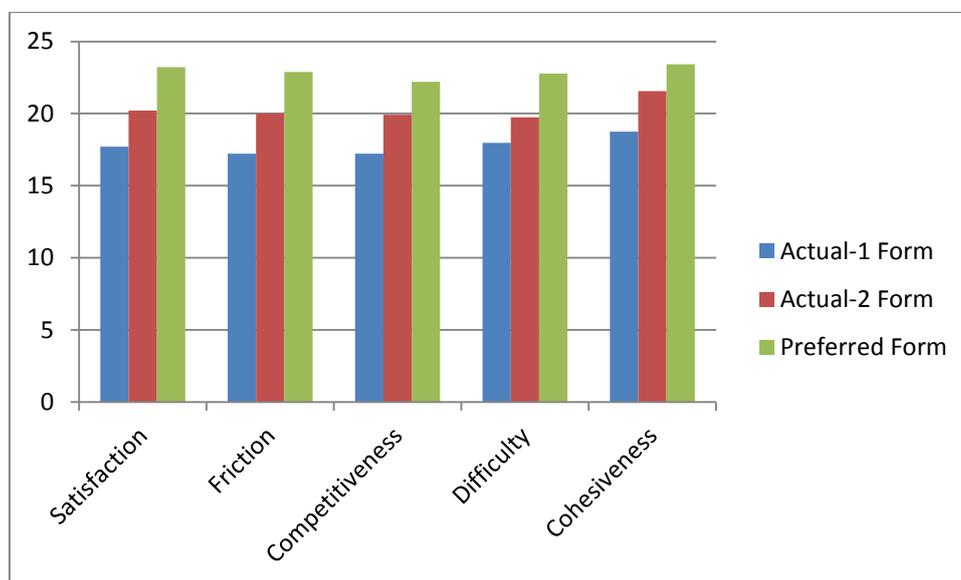
Using pupils were observed and interviews to study educational environments can be contrasted and defined the classroom or school environment in terms of the shared perceptions of the pupils has the dual advantage of characterising the setting through the eyes of the participants themselves and capturing data which pupils are at a good vantage point to make judgements about classrooms because they have encountered many different learning environments and have enough time in a class to form accurate impressions. In fact, the main purposes of this research were to use the MCI to obtain validation data on its three separate forms and to investigate differences between perceptions on the three different forms.

The MCI data from the actual-1, actual-2 and preferred scores each of the five scales. Results for the Form effect indicate that significant differences ( $p < .05$ ) existed among the instrument's three forms on all MCI scales. As show in Table 1-2, the *t*-test and the *eta*<sup>2</sup> statistic show for different between actual 2 and actual 1 forms, preferred and actual 1 forms, and for different between preferred and actual-2 forms. They were confirmed that each scale differentiated significantly ( $p < 0.05$ ) between perceptions of activity performance' pupils in different climates classes, significantly.

The interpretation of the profiles shown in Figure 1 is made easier by the fact that results are identical for the first five scales of Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness scales. For each of these five scales, the highest scores emerged for the student preferred form, the next highest scores for the student preferred forms, and the lowest scores for the student actual-1 form.

Fig. 1 illustrates the differences between the Actual 1, Actual 2 and Preferred Forms and indicates that pupils would prefer more than actual and enhanced in all of scales in the laboratories, which were significantly different from for comparing between paired sample forms and indicates that pupils would prefer more than actual and enhanced in all of scales in early childhood laboratories. The average item Mean for the actual-1, actual-2, and preferred MCI scales for the three unit of analysis. The results showed that pre-primary school early childhood trainee students teachers run their classes with fairly strong Satisfaction, Competitiveness, and Cohesiveness. They were

confirmed that each scale differentiated significantly ( $p < 0.05$ ) between perceptions of pre-primary pupils in different early childhood classrooms. As reported in Figure 1, 2 and 3, reliability coefficients for different the MCI scales.



**Figure 1:** Significant differences between pre-primary trainee student teachers were observed and interviews of their actual-1, actual-2, and preferred scores on the MCI

#### **D. Associations between Pre-Primary Educational Pupils were Observed and Interviews of their MCI on Early Childhood Trainee student teachers in Early Childhood Classroom Climates with the TOPRA**

Given the potential for pupils were observed and interviews to enhance their attitudes about, interest, and understanding in activity performance, other student, teacher, and classroom qualities have been explored to determine their relationship with pupils were observed and interviews of their classroom climates-learning environment. Correlation's studies have identified significant differences in pupils were observed and interviews according to achievement and others.

In this study, it was also considered important to investigate associations between pre-primary pupils were observed and interviews of their individualized participants, relationships between trainee student teachers and their pupils in early childhood classroom climates with their attitude toward activity performance. The Cronbach Alpha Reliability of the selected TOPRA was 0.84, when using individual student as the unit of analysis. This suggests that the scale is reliable for measuring pupils' attitudes in early childhood classroom climates classes with the MCI. These involved: simple correlation and multiple regression analyses of relationships between the set of actual-1, actual-2, and preferred environment scales as a whole and the TOPRA.

The main methods of data analysis were used to investigate this performance learning climate-attitude relationship. These involved: simple correlational analyzed of relationships between pupils' performances of both their actual performances to their trainee student teachers' interpersonal activities' learning managements with their attitudes toward learning activity outcomes; the multiple regression analyses of relationships between the set of actual early childhood climate scales as a whole and the attitude scale. The summary of the results of these analyzes is reported in Table 3-5.

**Table 3:** Associations between Actual-1 MCI Scales and Attitudes to Early Childhood Classes in Terms of Simple Correlation (r), Multiple Correlations (R) and Standardized Regression Coefficient ( $\beta$ )

Scale	Simple Correlation Attitude (r)	Standardized Regression Weight Coefficient Attitude ( $\beta$ )
Satisfaction	0.23*	0.21*
Friction	0.20*	0.19*
Competitiveness	0.21*	0.20*
Difficulty	0.19*	0.17*
Cohesiveness	0.22*	0.20*
Multiple Correlations (R)	0.7467*	
Coefficient Predictive Value ( $R^2$ )	0.5576*	

N = 720, \* $q < 0.05$ , \*\* $q < 0.01$ , \*\*\* $q < 0.001$

The simple correlation values (r) are reported in Table 3, Table 4 and Table 5 which show statistically significant correlations ( $q < 0.05$ ), the second type of analysis consisted of the more conservative standardized regression coefficient ( $\beta$ ) which measures the association between pupils' performances on each scale of the MCI and their attitudes toward early childhood classroom activity climates when the effect of relationships between the scale is controlled.

**Table 4:** Associations between Actual-2 MCI Scales and Attitudes to Early Childhood Classes in Terms of Simple Correlation (r), Multiple Correlations (R) and Standardized Regression Coefficient ( $\beta$ )

Scale	Simple Correlation Attitude (r)	Standardized Regression Weight Coefficient Attitude ( $\beta$ )
Satisfaction	0.28**	0.27**
Friction	0.26**	0.24**
Competitiveness	0.26**	0.25**
Difficulty	0.25**	0.23**
Cohesiveness	0.29**	0.28**
Multiple Correlations (R)	0.8475**	
Co-efficiency Predictive Value ( $R^2$ )	0.7183**	

N = 720, \* $q < 0.05$ , \*\* $q < 0.01$ , \*\*\* $q < 0.001$

In Table 3, Table 4, and Table 5, the multiple correlation Rs are significant for Actual-1, Actual-2, and Preferred Forms and show that when the scales are considered together there are significant ( $q < 0.05$ ) associations with the learning performances of their activity performance attitudes.

**Table 5:** Associations between Preferred MCI Scales and Attitudes to Early Childhood Classes in Terms of Simple Correlation (r), Multiple Correlations (R) and Standardized Regression Coefficient ( $\beta$ )

Scale	Simple Correlation Attitude (r)	Standardized Regression Weight Coefficient Attitude ( $\beta$ )
Satisfaction	0.33***	0.32***
Friction	0.30***	0.29***
Competitiveness	0.31***	0.29***
Difficulty	0.31***	0.30***
Cohesiveness	0.32***	0.31***
Multiple Correlations (R)	0.8931***	
Co-efficiency Predictive Value ( $R^2$ )	0.7977***	

N = 720, \* $q < 0.05$ , \*\* $q < 0.01$ , \*\*\* $q < 0.001$

In Table 3, Table 4, and Table 5, the beta weight ( $\beta$ ) show that in early childhood classes where the pupils perceived greater all of five scales for the MCI. The coefficient predictive values ( $R^2$ ) indicate that 57%, 72%, and 80% of the variances in pupils' attitudes to their early childhood classes were attributable to their performances of their

individualized classroom climates of the actual-1, actual-2, and preferred correlations between learning performance activities towards their learning activities and MCI learning climates among five scales. There are the most favourable learning performance attitudes in terms of the prefer that pupils perceived greater than actually perceive to be provided in early childhood classes would prefer authoritative trainee student teachers towards their performance attitude skills are provided.

## 5. Conclusions

The importance of activity performances education, and the urgent need for its improvement at all educational levels, has been widely recognized in numerous government reports in education system in Thailand, is provided mainly by the Thai government through the Ministry of Education from pre-school to pre-primary school. A free basic education of twelve years is guaranteed by the constitution, and a minimum of nine years' school attendance is mandatory. However, in 2009 the Ministry of Education extended free education to fifteen years.

These problems as above, the Ministry of Education, the Institute for the Promotion of Teaching Activity performances and Technology, and the Office of the Secretariat of the Council have set policy to be solved problems; one of the set policies is assigned to the Commission of Higher Education would be selected screening examination graduate pupils' admissions on the high quality in activity performances, technology, engineering, and others from Bachelor level pupils. The Faculty of Education in Mahasarakham has responded this policy and 30-trainee student teachers of the Early Childhood Education Department in Faculty of Education, Mahasarakham University who would be spent time for study's schedule plans for one year and in two semesters they must be training professional learning participation on school practices and teaching internship I and II in the academic year 2015. A part of Pre-primary of Activity performances Trainee for practicing teaching who will be changed to the trainee student teachers in their training professional learning participation on school, there are 30 early childhood trainee student teachers for teaching in 30 pre-primary schools in 30 early childhood classroom climates classes which consisted of 720 pupils were instructed.

An investigation of differences between pupils were observed and interviews of the same actual-1, actual-2 early childhood classroom climates environments and that preferred by pupils were reported of this study, using the MCI with the same sample of 720 pupils in 30 early childhood classes for the comparisons of pupil actual with the pupil preferred scored, pupils preferred are a more positive early childhood classroom

environment than was actually present for all five dimensions of the MCI. These dimensions are Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness scales. The results of this study report data analyses which provide information about: the validity of the MCI; differences between scores on different forms of actual-1, actual-2, and preferred the MCI; relationships between student learning performance responses of classroom individualization; and associations between pupils were observed and interviews and their actual and preferred were predictive efficiency, congruently.

This study was determined how pupils assess the various components of their early childhood classroom climates environment with the instructional designs of trainee student teachers. It also identified how the classroom climate affects pupils' learning outcomes. Findings revealed that pupils could assess the five components; such as; Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness scales of the classroom climates environment. Student satisfaction has the highest assessment while Difficulty has the least. The results also showed that the five components of the early childhood classroom climates are positively correlated with pupils were observed and interviews.

## 6. Discussions

This research study reports typical validation data for selected classroom environment scales. The reliability and validity of the MCI instrument were checked. The internal consistency/reliability (Cronbach alpha reliability coefficient) and discriminant validity (using the mean correlation of a scale with the other scales in the same instrument as a convenient index), and the ability of a scale to differentiate between the perceptions of pupils in different classrooms (significance level and  $\eta^2$  statistic from ANOVAs) were found. A summary of these values obtained separately for the actual and preferred versions of the MCI for the one units of analysis (individual mean and class mean) are expected, reliability estimates were higher when the class mean was used as the unit of analysis. On the whole, the statistics obtained were acceptable, though somewhat higher in value than those obtained previously in the original validation.

This research investigating the associations between pupils' attitude skills and their performances of the individualized early childhood classes, trainee student teachers interpersonal managed activities for their pupils, and early childhood classroom climates inventories are also inconclusive, showing significant as an indicator of pupils' attitudes toward activity performance. Having a standardized set of items for the assessment of performances has been shown to give more comparable within

sample results. Early childhood classroom climates classes' attitude skills had a positive effect on both all on five scales of the MCI. In terms of the Preferred Form, the influence and proximity: pupils in highly motivated classes had a more favourable perception of their trainee student teachers. Finally, this study only found an association between pupils were observed and interviews and their activity performances attitudes toward early childhoods' skill variables were found to be associated to pupils were observed and interviews of their MCI, interestingly.

### **Acknowledgment**

We would like to express my deepest appreciation to all those 30 early childhood trainee student teachers from the Early Childhood Department, Faculty of Education, Mahasarakham University and 720 pupils at the age from 4 – 6 years old in 30 early childhood classroom climate classes from the Pre-Primary Schools in Maha Sarakham and Roi-Et Provinces who provided us on original important data which the possibility to complete this research manuscript report. A special gratitude, we would like to give to our final year research project is going on paper calculating data work, completely. Our Early Childhood Volunteer Students, whose contribution in stimulating suggestions and encouragement, supported us for being observation and interview to coordinate our research project especially in writing this report, successfully.

### **References**

1. Fisher, D.; Henderson, D. and Fraser, B. (1997). Classroom environments & Student outcomes in senior high school biology. *American Biology Teacher* 59, 214-219.
2. Fraser, B. J. (1981). Using environmental assessments to make better classrooms. *Journal of Curriculum Studies* 13, pp. 131-144.
3. Fraser, B. J.; McRobbie, C. J. and Giddings, G. J. (1995). Evolution and validation of a personal form of an instrument for assessing activity performances classroom climates classroom environments. *Journal of Research in Activity performances Teaching* 32, pp. 399-422.
4. Fraser, B. J. and McRobbie, C. J. (1995). Activity classroom environments at schools and universities: A cross-national study. *Educational Research and Evaluation* 1, 209-317.
5. Kijkosol, D. and Fisher, D. L. (2005). Gender, school situation and school size differences in students of teacher-student interactions in biology classes in

- Thailand. *Proceedings of the Fourth International Conference on Activity performances, Mathematics and Technology Education Sustainable Communities and Sustainable Environments: Envisioning a Role for Activity performances, Mathematics and Technology Education*. Victoria, Canada August 25-20, 2005.
6. McRobbie, C. J. And Fraser, B. J. (1993). Associations between student outcomes and psychosocial activity performances environment. *Journal of Educational Research* 87, 78--85.
  7. Rentoul, A. J. and Fraser, B. L. (1979). Conceptualization of enquiry-based or open classroom learning environment. *Journal of Curriculum Studies*, Vol, 11; 1979, pp. 233-245.
  8. Santiboon, T. (2011). My school and my dream school climate. *Proceeding at the 4th International Conference on Educational Reform 2011 (ICER 2011) 'Equity in Education*. LuangPrabang. Loas PDR.
  9. Santiboon, T. (2012). Assessing activity performances students in learning activities performances in science classroom climates in Udon Thani Rajabhat University. *2012 International Conference on Education and Management Innovation IPEDR vol.30* (2012) © (2012) IACSIT Press, Singapore.
  10. Santiboon, T. (2012). Activity performances students in learning performances in physics classes. *International Journal of Innovation, Management and Technology*, Vol. 3, No. 2, April 2012.
  11. Santiboon, T. (2013). School environments inventory in primary education in Thailand. *Merit Research Journal of Education and Review*. (ISSN: 2350-2202) Vol. 1(10) pp. 250-258, November, 2013 Available online <http://www.meritresearchjournals.org/er/index.htm>
  12. United Nations Development Programme Evaluation (UNDP) (2012). *Annual report on evaluation*. Retrieved on 10 November 2012 from <http://web.undp.org/evaluation/evaluations/thematic-evaluations.shtml>

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).