# THE EFFECTIVENESS OF BILINGUAL EDUCATION IN THE BASIC EDUCATION CURRICULUM: ENGLISH FOR INTEGRATED STUDIES (EIS) MODEL

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- o http://sites.google.com/site/surapongeisth
  - <a href="http://www.eisschoolnetwork.net">http://www.eisschoolnetwork.net</a>
- <a href="http://www.worldlingo.com/ma/enwiki/en/English\_for\_Integ\_rated\_Studies\_Project/">http://www.worldlingo.com/ma/enwiki/en/English\_for\_Integ\_rated\_Studies\_Project/</a>
- http://en.wikipedia.org/wiki/English\_for\_Integrated\_Studies Project

### KEY WORDS (1)

- o Bilingual education → involves teaching academic content in two languages, in a native and secondary language with varying amounts of each language used in accordance with the program model. (<a href="http://en.wikipedia.org/wiki/Bilingual\_education">http://en.wikipedia.org/wiki/Bilingual\_education</a>)
- EIS → English for Integrated Studies → is the use of the English language by teachers as the medium of instruction in interdisciplinary studies. (Link to <a href="http://sites.google.com/site/surapongeisth">http://sites.google.com/site/surapongeisth</a>)
- NEST → Non-English Speaking Teacher → teachers that have never used English as a medium of instruction in any subject area before.

# Different Bilingual Education programs in Thailand

- \* English Program EP (1997)
- \* Mini-bilingual Program MEP
- \* Parallel Immersion Program PIP
- \*English for Integrated Studies
  - EIS (2004)

# Schools which uses English Bilingual Program.

Private Schools  Use foreign teachers to teach  (E.P / P.I.P)	Government Schools				
	Use foreign teachers to teach (E.P. / M.E.P)	Uses Thai teachers to teach ( E.I.S.)			
133	53	20			

(Based from the Office of Basic Education Commission, Office of the Private Educ. Commission, 2007)

# EIS SOLVED THE PROBLEM FROM EP AND MEP IN THAILAND

- How can we further benefit from the foreign teachers teaching in Thailand?
- What have they left for us after their departure?
- How can students from low economic status have the opportunity for bilingual education?
- How do we develop a certain type of bilingual education which can be used by Thai administrators and teachers for teaching-learning design and management, aiming to efficiently solve the problems mentioned?

### SOME RESULTS FROM THE 2006 EIS PILOT PROJECT

- SPSS students and <u>Teachers</u>
- 5 schools from Rayong Minicipality
- Benchamrachutid High School, Chantaburee
- On-the- Job training Model
- (Show picture and video)

#### WHAT IS EIS?



•The use of English textbooks, mainly from Singapore, in teaching any subject areas such as Math, Science, and Computer.

### WHAT IS EIS?(2)

•Improve the English competency of NEST's by using English as a medium of instruction



### WHAT IS EIS? (3)

- 3. Activities in class
- o Listen to me!
- o Everyone,
- o Girls, repeat after me.
- o Boys,
- o (Name)
- o Take out your pens.
  - pencils coloured pencils.
- Draw a picture of a..... (Object).
- Colour the picture.
- Copy these words into your books.
- Rule a line under the word (a word), please.
- I want you to do exercise <u>seven.</u>
- Answer the questions on page <u>six</u>.
- Oo you understand what to do?
- Don't start yet.
- You can start now.
- Put your hand up if you have finished.

  haven't

Add classroom **English** through lesson procedure.

### WHAT IS EIS?(4)

Both students and teachers learn English from the subject contents.



# TEACHING ENGLISH FROM MOTHER TONGUE, SYMBOL AND CLOSELY RELATED ENVIRONMENT THAT IS SIMPLE (S), SHORT (S), AND FAMILIAR (F) [SSF]

I can run.



I can jump.

I can read.

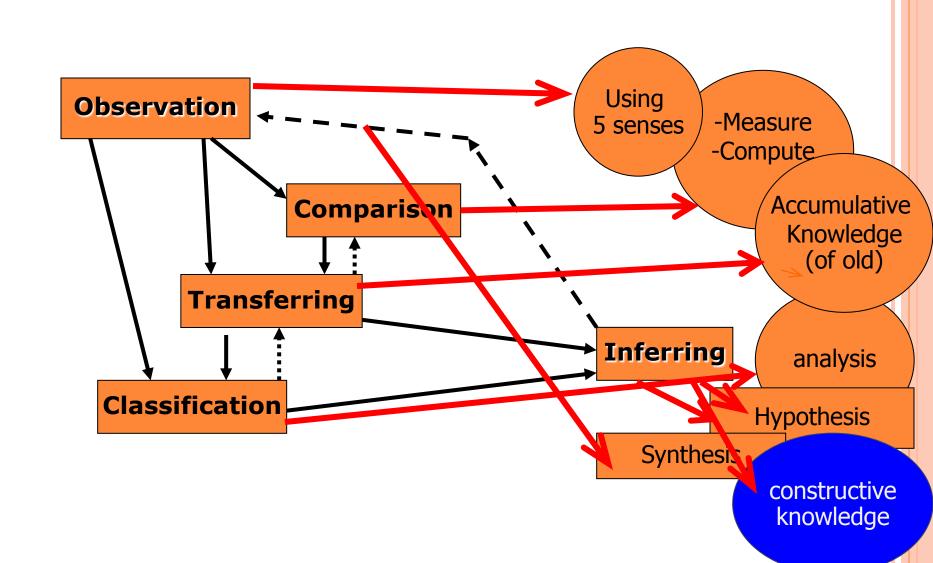


I can fly.



I can do many things

# THE OUTCOME FROM EIS: OK MODEL



ENHANCE ENGLISH COMPREHENSION FROM CONCEPTUALIZATION OF MATHEMATICS METHODOLOGY & SSF IN EIS SYLLABUS APPROACH

 To engage English comprehension on the numbers operations

1 = one, 2 = two,...

One and two is three.  $\implies$  1 and 2 is 3

 $\rightarrow$  1 plus 2 equal 3  $\rightarrow$  1+2 = 3

There are 25 boys and 52 girls.  $\implies$  25 + 52

 To engage English comprehension statements from Mathematical Statements

21 is greater than 12  $\implies$  21 > 12 Subtract 25 from 309.  $\implies$  309 - 25

#### THE RESULTS FROM MODERN BILINGUAL EDUCATION

Comparison of the Standard English Achievement Test (2005)

Class	Number of Students	Good(%)	Average(%)	Poor(%)
Sec.1 EIS	111	-	48.56	51.35
Sec.1 Regular	80	-	12.50	87.50
Sec.2 EIS	106	-	66.04	32.08
Sec. 2 Regular	73	-	17.81	79.45
Sec. 3 Regular	146	0.68	28.08	71.23

Data: February 2006

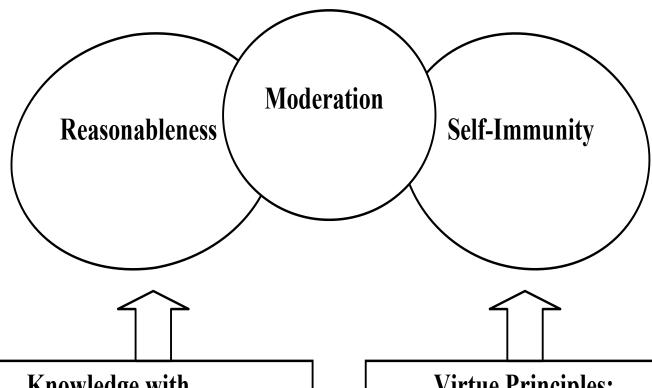
### COMPARISON OF STANDARD SCORE PRI.1 (2006)

Subjects	Math(100)		Science	e(100)	English(100)		
School	pre post		pre	post	pre	post	
Watkhod	4.7 68.45		21.63 90.96		21.8	86.85	
Watlum	0.5	48.55	15.13	15.13 <i>71.83</i>		72.8	
Watpaknam	2.2	51	25.79	47.08	<b>47.08</b> 23.35		
Banpakklong	6 26.2		35 66.88		37.5	55.95	
Sattit	4.35	55.75	25	65.77	15.6	64.5	
EP	45.95		83.33		77.5		
MEP	34.65		78.63		72.05		

### COMPARISON OF STANDARD SCORE PRI. 4(2006)

Subjects	Math(10	0)	Science	(100)	English(	English(100)		
School	pre	post	pre	post	pre	post		
Watkhod	28.98 40.96		28.4	41.35	31.07	51.22		
Watlum	23.62	54.7	25.45	52.51	25.22	66.80		
Watpaknam	23.26	36.5	24.32	33.72	19.98	39.10		
Banpakklong	23.66 32.22		32.17	39.48	30.24	34.22		
Sattit	<b>24.66 40.72</b>		30.89	30.89 47.06		58.31		
Regular	42	42.48		_		7.12		
EP	45	45.12		44.67		66.83		

# Sufficiency Economy Philosophy(SEP)'s Theory



#### **Knowledge with**

Intelligence, Consideration and Prudence

#### **Virtue Principles:**

Honesty, Patience, Diligence, Perseverance and Sharing

# TABLE 1. COMPARATIVE DATA SHOWING NATIONAL AVERAGE PERCENTAGE OF THE STUDENTS' ENGLISH ACHIEVEMENTS IN PRIMARY 6, SECONDARY 3 AND SECONDARY 6 FROM ACADEMIC YEAR 2003 TO 2007

Academic year in %  Academic Level	2003	2004	2005	2006	2007
Primary 6	41.14	37.34	34.51	32.12	38.12
Secondary 3	36.14	37.92	32.98	30.85	29.20
Secondary 6	37.34	31.71	39.14	29.81	30.93

# WHY IS ENGLISH COMMUNICATION SO IMPORTANT?

- o....youths need to learn and realize the importance of [the] English language to understand other nations...(The former Thai Prime Minister General Surayuth Julanon,2007)
- English is a language widely used globally for exchanging information and communication. (Cenoz & Jessner, 2000)

# THE PURPOSES OF THIS CASE STUDY

•To discover the key components of EIS which may improve the effectiveness of the developmental bilingual education in Thai basic education and to analyze and align the key components of the EIS approach laying on SEP's theory.

# RESEARCH QUESTION (1)

- What are the key components of EIS approach to create effective curriculum development in Thai basic curriculum?
  - What are the characteristics of EIS approach in the curriculum?
  - Can EIS teaching-learning management develop efficacy of NEST?
  - What are the key characteristics of school principals for successful EIS management?

# RESEARCH QUESTION (2)

- What are other local environmental supporting factors for EIS effectiveness?
- What are the Efficiency and Effectiveness of EIS developing Project, regarding learning results and compared learning outcome of SPSS's Secondary 3 and 6 students in the academic years of 2006-2008 and learning outcome in English subject of students in EIS program, EP program and other special program year of academic year 2007?
- Does EIS align with SEP?

### Conceptual framework of research study

#### 1. Independent Variables

#### 1.1 EIS Project Implementation

- nput
- · EIS Curriculum
- · EIS staged training
- · School selection and Scholl participation
- · School Administration
- Teachers
- Students
- Instructinal Managment
- Instructional Deliver
- Instructional Media and Technology
- Institution Supporter
- Evaluation Students Evaluation, Program Evaluation



Process

- · Comparative students academic achievement
- Teachers English language competency improvement
- School leadership behavioral changes
- Community satisfaction

1.2 Documents Study

#### 2. Research Process

In-depth interview, Site observation, Document analysis and Comparative students' academic achievement

#### 3. Results

3.1 Key success factors of using EIS approach in basic Education Curriculum3.2 The analysis and alignment of the EIS approach compared with SEP's theory

### POPULATION

The population of in-depth research are from the school's administrators, teachers, students and parents from SPSS and the schools that implement EIS, both primary and secondary (Junior & High), schools in the school year 2006-2008.

# RESEARCH METHODOLOGY (1)

- In-depth interview,
- Site observation,
- ODocument analysis (The 2006-2008) study used purposive sampling to gather data from 20 samples in both primary schools and secondary schools which implemented EIS for at least 2 years in Rayong and Chantaburi provinces)

# RESEARCH METHODOLOGY (2)

• Comparative students' academic achievement, was conducted in the secondary schools EIS, EP, and other special programs in several schools in academic year 2007 in Rayong only.

#### THE LEARNING ACHIEVEMENT TEST

• The 2006 English NT exam set with randomly re-arranged test questions and answer choices was used as pretest and posttest instruments to determine and compare the learning achievement of all secondary 1 and 2 students in the EIS, EP or MEP and other special programs in other schools in the academic year 2007. (pretest in May, 25-28, 2007 while the posttest was conducted in June, 2-6, 2008)

#### IN-DEPTH INTERVIEW

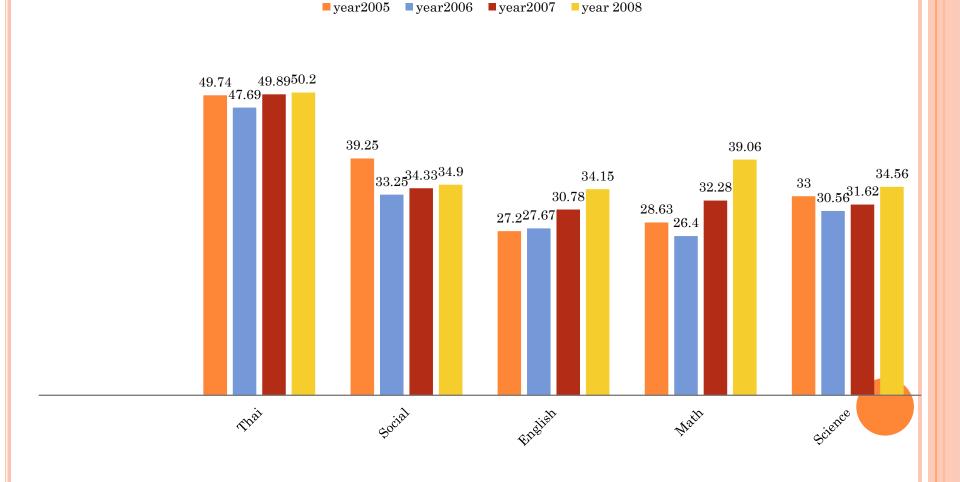
• Conducted an in-depth interview of 4 principals, 8 teachers, 4 students and 3 parents; 3 teachers, 2 students and 2 parents of SPSS; 2 principals, 3 teachers, 2 students and a parent of Benjamarachutid Chantaburi, and 2 principal and 2 teachers of primary schools; Watplongsawai and Tesaban Watkhod, for 30-90 minutes per each person.

### QUALITATIVE DATA ANALYSIS

 Creswell's qualitative research case study approach(1998)

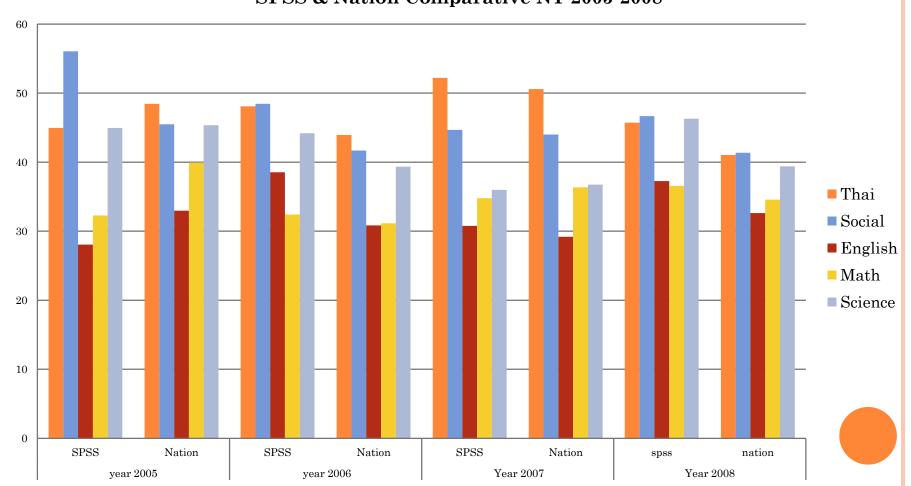
# TABLE 2. SPSS AVERAGE O-NET(MS.6) SCORE COMPARISON, ACADEMIC YEAR 2005-2008

#### Comparative O-Net SPSS 2005-2008

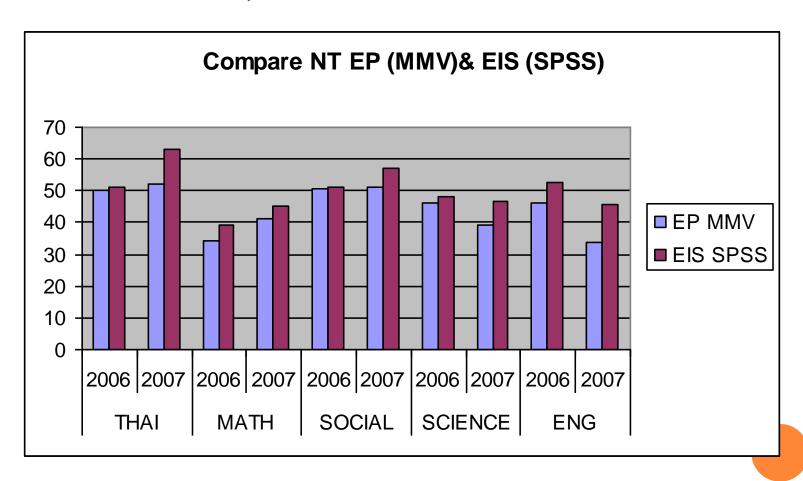


# TABLE 3. SPSS AND NATIONAL AVERAGE NT(MS.3)SCORE COMPARISON, YEAR 2005 -2008

SPSS & Nation Comparative NT 2005-2008



# TABLE 4. EP (MMV) AND EIS (SPSS)AVERAGE NT SCORE COMPARISON, ACADEMIC YEAR, 2006 & 2007



# TABLE 5: THE COMPARISON CLASSIFICATION, NUMBER OF SCHOOLS, CLASSIFICATION GROUP AND AVERAGE SCORE OF O-NET, ACADEMIC YEAR, 2008

The average score of each	The number of schools / Average score					
groups	Junior High SchoolO-Net (All:Chonburi:Rayong)	Senior High School O-net (All:Chonburi :Rayong)				
Highest group(1)	269:5:3	277:11:6				
Average score of SPSS	42.50	38.57				
Average score of Higher group	37.94	35.76				
Higher group (2)	593:15:12	563:15:9				
Average score	34.10	32.08				
Lower group (3)	861:6:3	851:4:4				
Average score of lower group	31.97	30.05				
Lowest group (4)	686:5:1	649:1:0				
All schools	2409:31:19	2409:31:19				

T	The comparison of Learning-Teaching													
MANAGEMENT EFFICIENCY OF ANY SCHOOL TYPES														
Item	T1		Pretest* June,2007 Posttest**June,2008								Differ ently	ently The		
School Types	Level	N	X(40)	$\operatorname{SD}$	Max	Min	N	X(40)	$\operatorname{SD}$	Max	Min	of avera ged score	per year(bat s)	th
EIS	MS. 1	32	13.69	3.03	23	9	32	18.88	3.87	26	13	5.19	4,000	)
EP 1	MS. 1	20	18.55	3.68	24	12	20	21.75	4.29	27	14	3.20	34,00	0
EP 2	MS. 1	38	22.74	4.14	31	13	38	26.84	3.81	35	17	4.10	43,75	0
Special Progra m	MS. 1	90	14.22	4.13	26	6	90	18.82	4.65	28	10	4.60	10,00	0
EIS	MS.	34	18.32	4.76	32	9	34	22.65	3.77	30	15	4.33	4,000	)
EP1	MS. 2	31	16.87	4.64	28	7	31	21.64	4.03	32	16	4.77	34,00	0
EP2	MS. 2	46	26.26	3.71	36	19	46	27.97	3.96	36	16	1.71	38,75	0

Special

of Ms.3

All students

 ${\bf Progra}$ 

MS.

2

79

196379

17.73

12.34

5.15

4.71

27

39

8

79

196379

20.03

12.34

4.49

4.71

29

39

9

2.30

0.00

10,000

# EIS'S KEYS SUCCESS FACTOR

- Integrating SSF, OK Model, Mathematical Methodology Model and CT in Teaching-Learning Process through Textbooks and ICT in English
- Leading for Change in School Leaders based on enthusiasm and Instructional Leadership
- Monitoring through <u>Coaching and Mentoring Process</u>
- o On- the- job <u>Training through Workplace Learning</u>
- Subject Matter Knowledge, Teaching Methodology, Enthusiasm and Inspiration (internal) of instructors
- o Align Community Relation with school vision
- Educational Network

## EIS' ASSUMPTION

- 1. Learners are able to effectively learn the second language from their mother tongue, symbolic language and from their closely related environment, such that Short (S), Simple (S) and Familiar (F) so we call it **SSF model**.
- 2. If the instructor arranges the learners to practice reading and writing with the English language by using science learning skills, (**Observing Knowledge (OK) Model** learning skill, observation, comparison, classification, transferring and inferring,) it will lead to the increase of the learners' ability in reading-writing and reading comprehension in English.

# EIS'S ASSUMPTION

- 3. If the instructor constructs his lessons in a way that lets the learners connect the notions to the English language through analysis and mathematical problem solving, This MM Model (Mathematical Methodology Model) promotes an easier and faster way to increase the learner's English comprehension.
- 4. If the instructors use English enough in classroom interactions, it leads to the learner recognizing and understanding English more quickly.

## TO ENGAGE SEP IN EIS STRATEGY

- **Moderation**: Based on Thai culture, the EIS approach is moderately sharing the same opportunity to Thai people of every economic difference.
- oReason: Applying conceptual methods to solve the problem through conducting researches, EIS approach is the strategy which solves problems of teaching-learning procedure, learning effectiveness, English learning and analytical thinking of students.

# TO ENGAGE SEP IN EIS STRATEGY(2)

Self-Immunity: In the EIS curriculum Thai teachers who have never used English in their classes are trained and develop their language skills for teachinglearning processes bringing about continuous senses of skill development, searching and onthe-job learning for their carrier development.

# COMPARE EIS vs. SEP's condition(2)

Under the condition of using

knowledge in developing the EIS syllabus, integrating the concept of SSF, OK and MM Model. As well as the use of theories for second language learning in teaching-learning activities for certain subjects and the use of English teaching materials issued in learning standards of Thai basic educational curriculum

## COMPARE EIS vs. SEP's CONDITION

 Under the condition of morality cultivated in teaching-learning process, the EIS curriculum develops morality in classes by the use of learning assessments and evaluation as mentioned in the 1999 Act of Legislation of National Education to encourage and control learning behavior of learners by continually emphasizing morality.

 Figure 2: Conceptual Diagram of Administrating and Managing Bilingual Curriculum to contribute Sustainable educational Opportunity in the cultural Thai context

# APPLICATION AND CHANGES AFTER THE IMPLEMENTATION

• The findings gained highly favorable responses of the schools nationwide. Many schools in Rayong are participating in the advanced stage experiment, while many renowned schools in the country have joined since 2009. EIS has a network of 125 schools throughout the nation and was announced as a leading framework (ETV, 2010) by former Minister of Education Julin Laksanawisit.

• The current Minister of Education Mr. Chinaworn Bunyakiat has accepted and engaged EIS as a policy strategy to enhance the second decade of Thailand Educational revolution.

http://www.moe.go.th/websm/2010/de c/440.html

# THE EXAMPLE OF EIS NETWORK FROM BEIJING, 2007



We can't solve today's problems using the yesterday's solutions

• Thank you