



EMaDA & RIA Interim Progress Sharing Event

**Research on developing students'
thinking ability within the English Subject
in primary and secondary schools in Hubei province**

10/1/23, 11:40 GMT

10/12 January 2023

Supported by

UK partner ISLI (University of Reading)

**ISLI = International Study and
Language Institute**

**Departments: CPD short course
training; EAP teaching; foundation
year teaching; global partnership
programmes and projects.**

**EMaDA project directly supports ISLI's
CPD training for English Language
teachers at schools in China.**



China partner HIES (Hubei Education Dept)

**HIES = Hubei Institute of Educational
Sciences**

**Directing: educational management
research; educational policy &
assessment**

**Promoting: research outcomes into
school teaching; communication and
exchange with national / international
partners**



**Large and populous Hubei gives good access to different school
types (urban/rural), and a base to generalise to a national level.**

The project

- *EMaDA funding*
- *Focus on support for rural students*
- *Primary and secondary schools (Years 3-9; prep for Senior school)*
- *in Hubei province*
- **Linked to 2017 and 2022 national curriculum requirements**
- **Investigate current understanding and teaching of ‘thinking ability’ (primary research)**
- **One year initially**
- **Produce framework and report**
- **Can lead to further projects and CPD implementation**

Research Questions

1. How do primary and secondary English teachers in Hubei province understand thinking ability and its link with English teaching?
2. How do primary and secondary English teachers in Hubei province develop their students' thinking skills in classroom teaching?
3. How do primary and secondary English teachers in Hubei province view developing thinking skills in their teaching?

Methodology: mixed methods

Data sets	Subjects	Data collection method	Data analysis
Survey	Teachers: (R/S/U) <ul style="list-style-type: none">• Rural• Semi rural• Urban	Questionnaire 7807 responses (Quantitative)	SPSS
Classroom teaching obs.	Teachers (R/S/U)	Video recorded lessons 9 hrs; 9 individual lessons (Qualitative)	Observation notes and discussion
Focus groups	Teachers (R/S/U)	35 participants; 6 groups Transcription (Qualitative)	NVivo

What has been achieved so far (Apr-Dec 2022)

UK





- literature review
- analysed video recordings
- created survey questionnaire
- prepared semi-structured guidelines for focus groups
- delivered the focus group discussions
- analysed data

Next, Jan-Apr 2023:

- produce framework
- produce sample teaching
- publish report



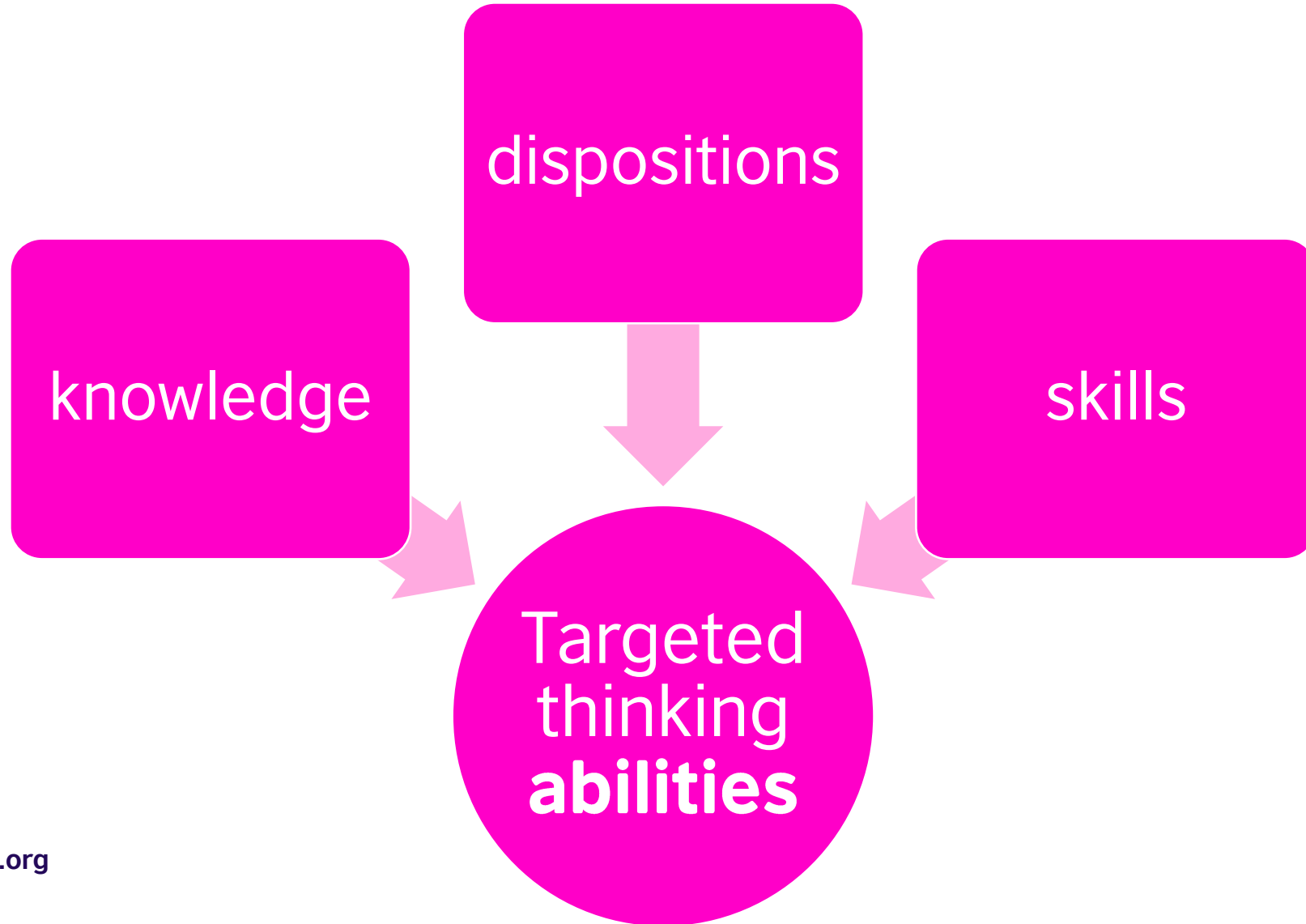
China

-  - literature review of the status-quo in China
-  - video recorded teaching events
- distributed questionnaire
- set up focus groups
-  - supported proofreading focus group transcripts
-  - regular meetings, helpful discussions

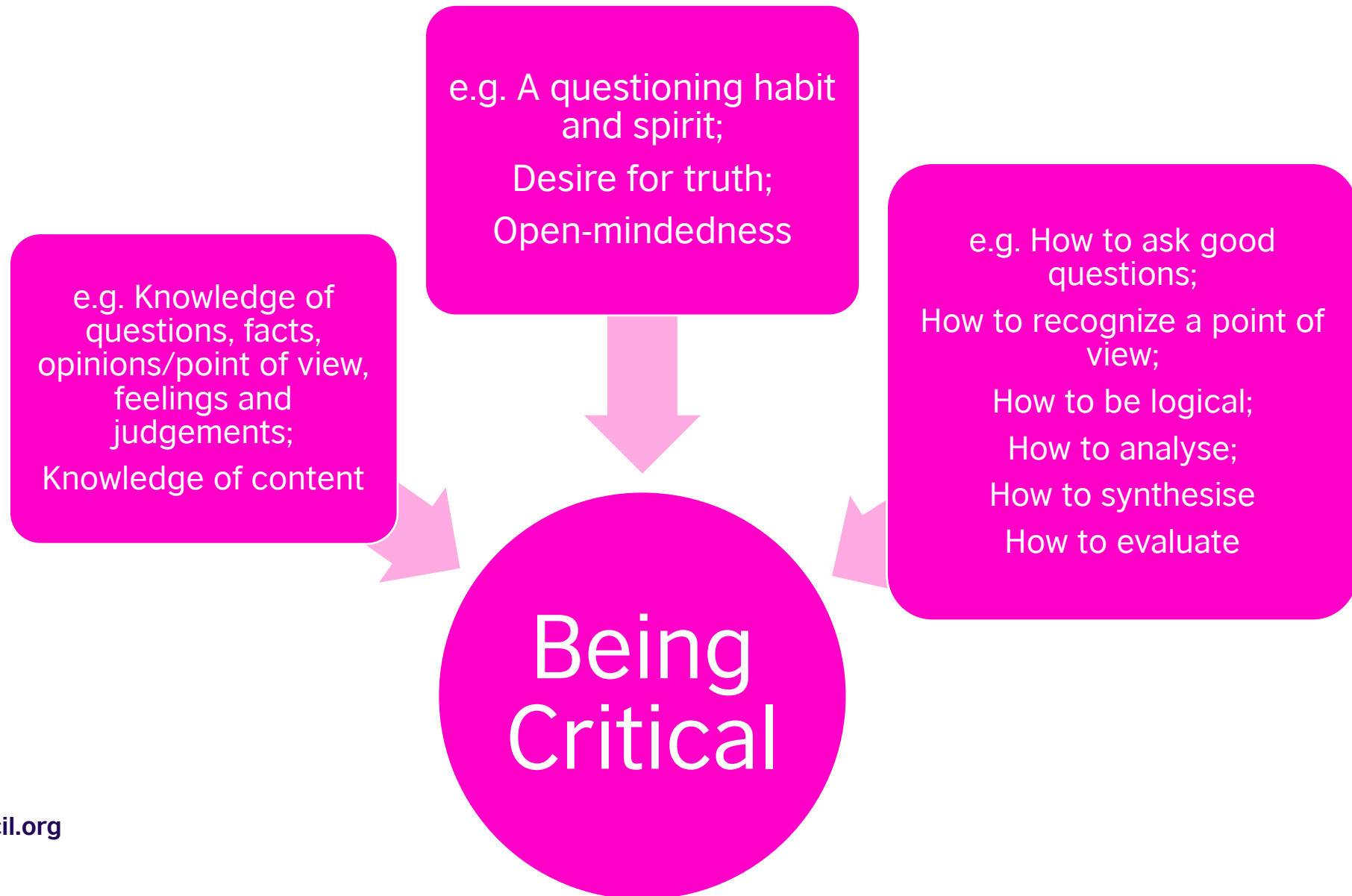
ISLI are very grateful for the data of great quality and quantity!



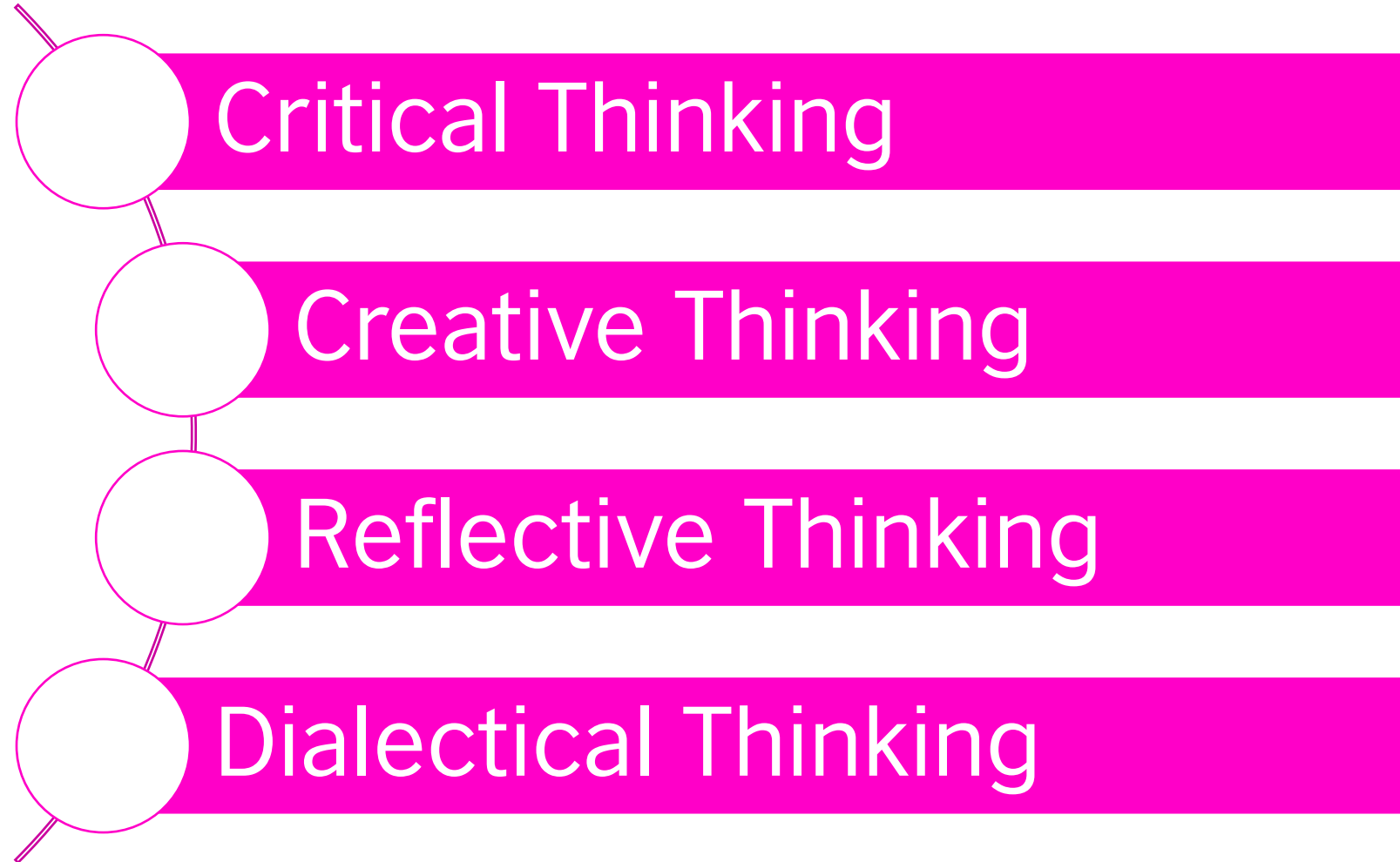
Conceptual Framework of Targeted Thinking Abilities



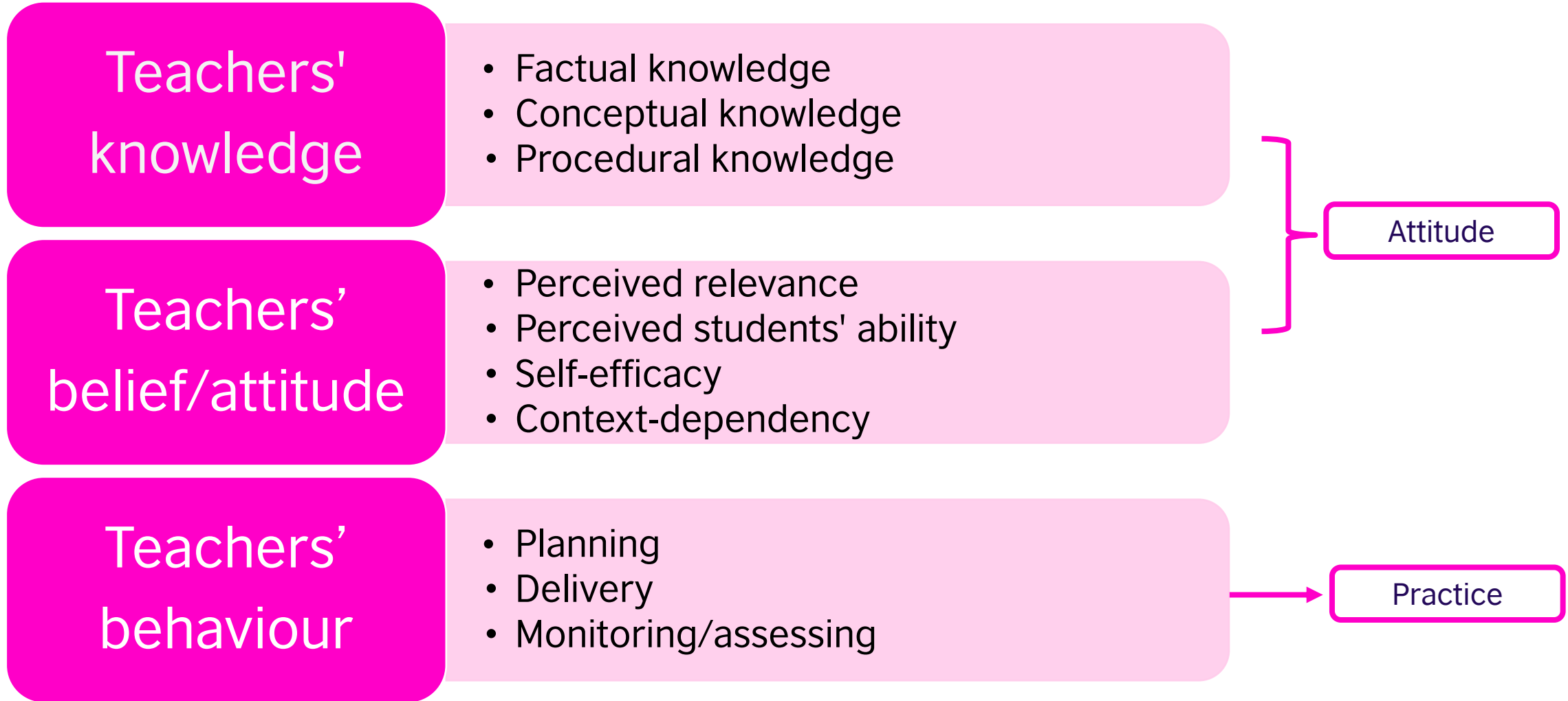
Critical Thinking as an Example



Four Types of Thinking Identified in the New Curriculum



Conceptual Framework for the Questionnaire



Reliability and Validity of the Questionnaire

Reliability

<i>Scale</i>	<i>Attitude</i>	<i>Reliability</i>
<i>Statistics</i>		
Cronbach's		
Alpha		N of Items
.713		23

<i>Scale</i>	<i>Practice</i>	<i>Reliability</i>
<i>Statistics</i>		
Cronbach's		
Alpha		N of Items
.805		17

Validities

Face validity:

closed-ended questions; comprehensibility; translation

Content and construct validity:

theoretical frameworks; expert panel; adaptation of existing instruments

General Survey Result 1 - T-test and Correlation test

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Attitude	887.849	7805	.000	3.27986	3.2726	3.2871
Practice	720.562	7805	.000	3.37907	3.3699	3.3883

Correlations

		Attitude	Practice
Attitude	Pearson	1	.472**
	Correlation		
	Sig. (2-tailed)		.000
	N	7806	7806
Practice	Pearson	.472**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	7806	7806

** . Correlation is significant at the 0.01 level (2-tailed).

General Survey Result 2 - Regression Test

Summary of the Regression test

Regression Weights	Beta Coefficient	R ²	F	t- value	p- value
Attitude → Practice	.57	.23	264.9	43.9	.000
Training Experience → Practice	-.057	.23	264.9	-0.67	<.001
Teaching Experience → Practice	.044	.23	264.9	3.36	<.001
School → Practice	-.041	.23	264.9	-4.88	<.001
Region1 → Practice	-.029	.23	264.9	-2.420	.016

Some Items of Beliefs by Training Experience (Means)

Some Items of Beliefs about Thinking Ability by Training Experience Means

Mean	8. Learning English will improve students' thinking skills.	11. I know how to develop students' thinking ability through teaching English.	13. My students can demonstrate a satisfactory level of thinking ability in my class.	15. I have a clear idea of what critical thinking means in English teaching.	16. R_ In my understanding, critical thinking means criticizing and/or refuting.	21. R_ For me, creativity is more of an innate trait.	24. In my teaching, I attach great importance to develop students' intercultural competence.	28. Knowing one's intellectual or cognitive strengths and weaknesses will make students better learners.
Yes	3.99	3.59	3.06	3.45	3.47	3.41	3.76	4.00
No	3.86	3.22	2.82	3.16	3.46	3.37	3.61	3.97
Total	3.93	3.41	2.94	3.32	3.47	3.39	3.69	3.99

Beliefs in Thinking Ability by Region (means)

Some Items about Beliefs in Thinking Ability by Region Means

	Region				
	Urban	County and Suburban	Township	Remote Rural	Total
8. Learning English will improve students' thinking skills.	4.05	3.87	3.87	3.84	3.93
11. I know how to develop students' thinking ability through teaching English.	3.54	3.42	3.36	3.26	3.41
13. My students can demonstrate a satisfactory level of thinking ability in my class.	3.04	2.95	2.87	2.89	2.94
15. I have a clear idea of what critical thinking means in English teaching.	3.46	3.27	3.25	3.21	3.32
16. R_ In my understanding, critical thinking means criticizing and/or refuting.	3.52	3.44	3.45	3.45	3.47
21. R_ For me, creativity is more of an innate trait.	3.41	3.39	3.38	3.37	3.39
24. In my teaching, I attach great importance to develop students' intercultural competence.	3.80	3.66	3.64	3.60	3.69
28. Knowing one's intellectual or cognitive strengths and weaknesses will make students better learners.	4.04	3.96	3.97	3.94	3.99

Preliminary Findings (1)

Beliefs and Attitudes were correlated to Behaviour/Practice at a moderate level.

It is necessary to improve teachers' beliefs and attitudes through training.

Focus Groups - Understanding of Thinking Ability

- A taxonomic view

“Logical thinking, abstract thinking, divergent thinking, convergent thinking,

concrete thinking, discrete thinking, visual thinking, instinct thinking” (Daisy, Group 1)

- A developmental view (hierarchical)

"... Lower levels feature concrete thinking, and it gradually grows to be more abstract [at higher levels]." (Flora, Group 1)

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- A disciplinary view

"It also means an English way of thinking, for me." (Elina, Group 4)

- A patchy cognitive view

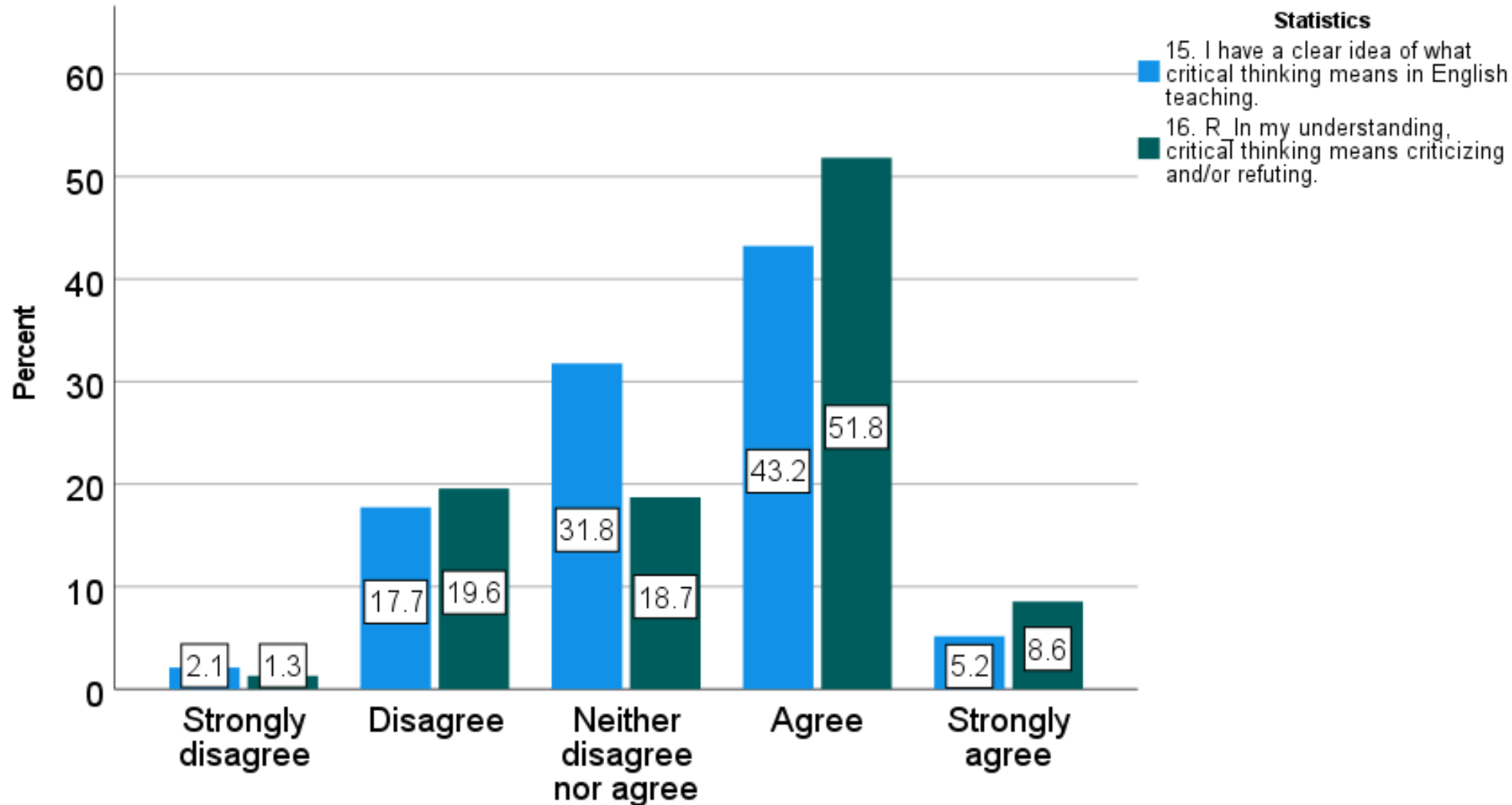
"Thinking ability is to develop students' skills for observation, identification, generalisation and inference. " (Diana, Group 2)

- A more holistic view

"The 2022 Curriculum ... says, thinking ability reflects the levels of a series of cognitive manoeuvres, such as understanding, analysing, comparing, inferring, critiquing, and evaluating etc. ..." (Faye, Group 4)

Survey - Understanding of Critical Thinking

Critical Thinking



Focus groups - A Dominant View of Critical Thinking

- CT means a questioning spirit

"...students should learn to question [everything], not blindly accepting what teachers instill" (Donna, Group 2)

"... they should question the answers [I give]." (Jenny, Group 4)

"...question authorities..." (Aria, Group 6)

Preliminary Findings (2)

Intuitive, incomplete, inaccurate and simplistic understanding of Thinking Ability.

Confidence and ability to vocalise and explain these concepts/constructs has a big variation.

The link between developing Thinking Ability and teaching English largely remains elusive, discrete and not clear enough to them.

Implications

Key concepts/constructs of Thinking Ability require some systematic construction work, particularly for teachers from rural areas.

A need for pedagogies which should unite the development of thinking and learning English and make the link visible and operational to teachers.

A need for a defined language.

Project outcomes, by April 2023:

- 1. A landscape research report on thinking skills development.**
- 2. A bilingual framework as a guidance for teachers CPD and classroom practice.**
- 3. A series of sample lesson plans to accompany the framework.**

Plus:

- Publications**
- Improved CPD training for English Language teachers in Chinese Schools**

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Q&A



Contact: Assoc. Prof. Bruce Howell
d.b.howell@reading.ac.uk