

# The Role of Theory in Learning Study

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1

- Lesson Study (Japan)
- Teaching Study (mainland China)
- Learning Study (Hong Kong, China; Sweden)

2

Focus on

How to help students to learn something  
specific (object of learning)

How to organize learning in general  
(activities, arrangements)

3

## Functions of Lesson Studies

- In-service training for participating teachers
  - Improving learning for participating students
- 
- Contributing to teachers' professional knowledge

4

- Focus on the object of learning
- Lesson Study as research

5

object of learning / research

$$\begin{array}{r} 51 \\ - 49 \\ \hline 18 \end{array}$$

6

- Addition and subtraction within the range 1-18
- Newton's three laws
- Cantonese tones
- Hitting a target with a ball

- Price as a function of demand and supply
- Creativity in Chinese writing
- Understanding argumentative texts
- Reading and writing

- Knowing by heart
- Executing counting strategies
- Perceiving part-whole relationships

$2+1=$ $2+2=$ $2+3=$ $2+4=$ $2+5=$ $2+7=$ ...	$2+7 \Rightarrow 7+2=7, 8, 9$ <div style="text-align: center;"> <math>\underbrace{\hspace{1.5em}}</math>  <math>2</math> </div>	$9=1+8$ $9=2+7$ $9=3+6$ $9=4+5$ $9=5+4$ $9=6+3$ ...
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$$2 + \_ = 9$$

$$\_ + 7 = 9$$

$$9 - \_ = 2$$

$$\_ - 2 = 7$$

...

- Design experiments
- Teaching sequences

Group A ⇔ Group B ⇔ Group C

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Group A at t<sub>1</sub>



Group B at t<sub>2</sub>



Group C at t<sub>3</sub>

← practical relevance

→ generalizability

practical  
relevance

high

low  
high

high  
high

low

low  
low

high  
low

low

high

→ generalizability

Pasteur's quadrant