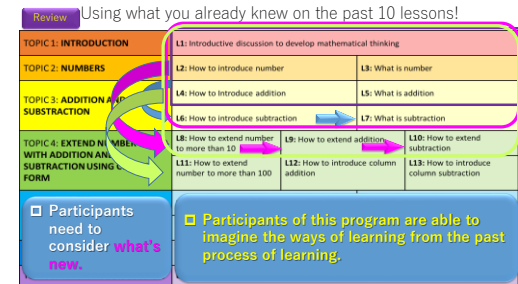
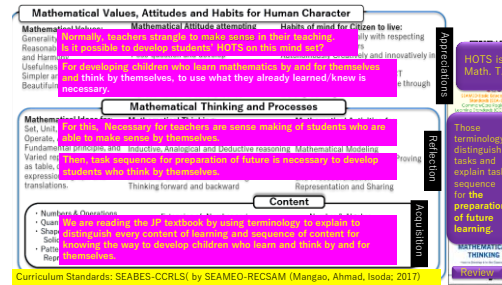


筑波大学  
University of Tsukuba  
Free Program for SEAMEO School Network  
from the University of Tsukuba, Affiliate Member of SEAMEO  
**Teaching Mathematics to Develop Mathematical Thinking as Higher Order Thinking:**  
How do you teach? Why?

### Lesson 11: How to extend Number more than 10

Isoda, Masami, Prof., Faculty of Human Sciences  
Director of CRICED, The University of Tsukuba, Japan  
With collaborations of  
Nguyen Chi Thanh and Aida Yap



What is the number?  
We usually teach:

- Existence and necessity  
Cardinal (Set) Number
- Order/Larger or Smaller/  
Greater or Less

How do we teach the number more than ten?  
How do we teach the number more than hundred?

- Operations

How do we teach addition more than ten?  
How do we teach subtraction more than ten?

How do you teach?  
Make sense?  
Acquisition of proficiency?

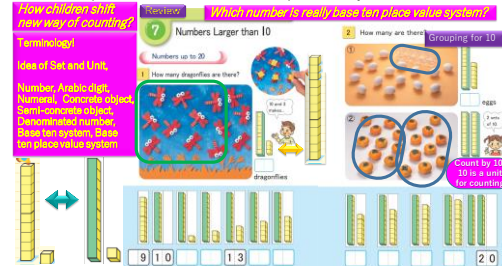
For what?  
Number sense?

In Japan:  
Make sense (understand meaning)

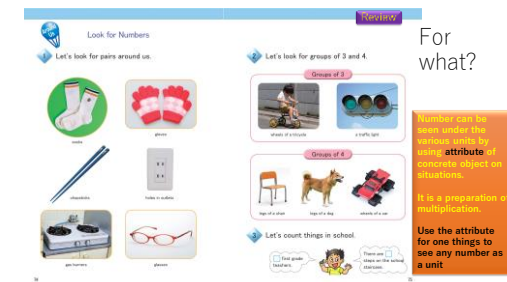
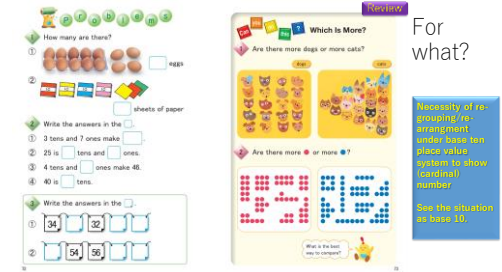
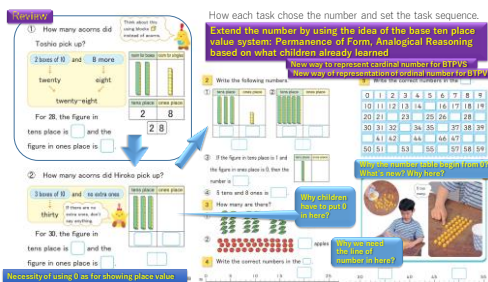
Think about how to calculate/operate/find the easier way to answer  
Acquisition of proficiency

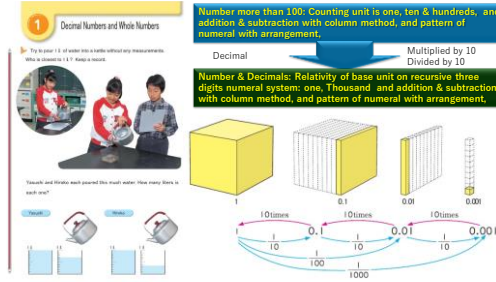
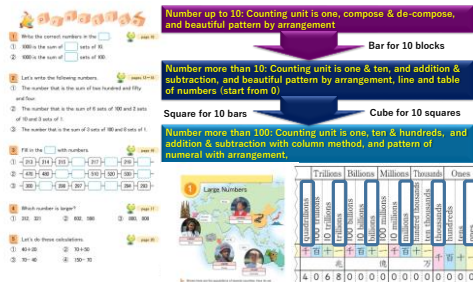
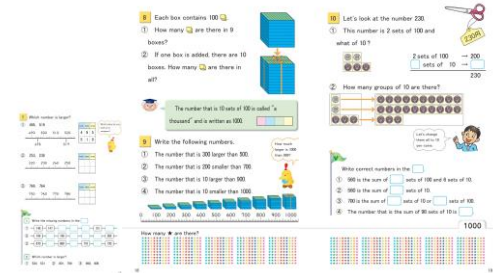
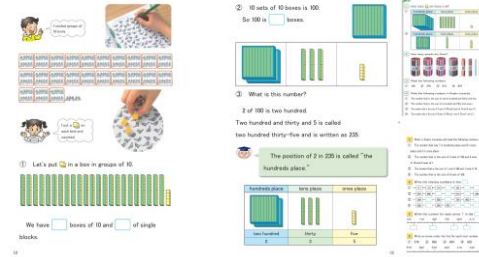
Try to teach how to extend the number

What is the representation/model for the base ten place value system

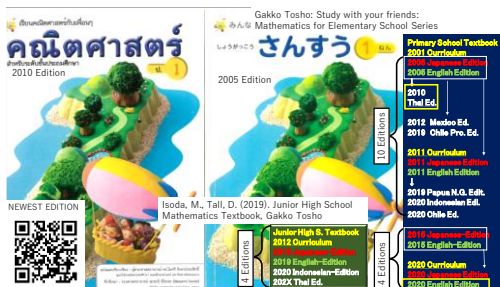


When we should teach count by two and five, here?  
Why we need the line of number, here?





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