

Achieving the goals of reforms through Learning Studies

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Have practices been changed in Hong Kong?

- ❖ *Catering for individual differences through ability streaming (capability v.s. opportunity to learn)*
- ❖ *Superficial coverage of curriculum in response to time constraint (technician v.s. professional)*
- ❖ *Focusing on teaching arrangements (distal v.s. proximal variables)*
- ❖ *Student centred rhetoric (non-directional v.s. directional)*

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Learning is always the learning of “something”

Objects of learning

General aspect - related to long term educational goals

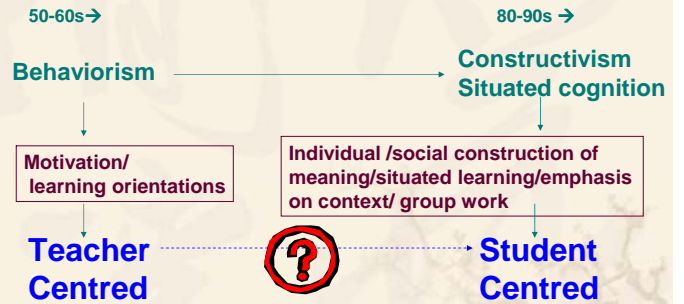
Specific aspect - related to content upon which the general aspect is achieved

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What contributes to pupils' incomplete ways of seeing?

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Learning theories and related teaching approaches



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We perhaps need a new way of looking at learning

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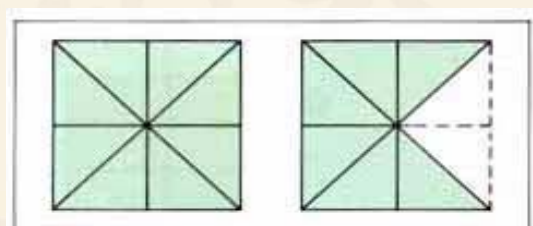
Knowing is a way of seeing something

Learning means:

To be able to see the object of learning in new and meaningful ways such that knowledge acquired can be applied appropriately to new situations and to illuminate new phenomena.

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What is $8/8 + 6/8$?



14/8 or 14/16 ?

8

Look at the leaves of this tree carefully:



9

Which of these did I show you?

10



A

11



B

12

Which of these did I show you?



A



B

13

Some students may not be able to focus on the critical aspects



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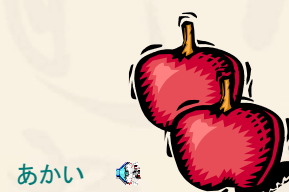
Theory of Variation (變易學習理論)

- ❖ Learning is a function of discernment, and
- ❖ discernment is a function of variation.

Lo, Pong & Chik (Eds.) (In press). For each and everyone: catering for individual differences through Learning Studies.
Marton, F. & Booth, S. (1997). Learning and Awareness.

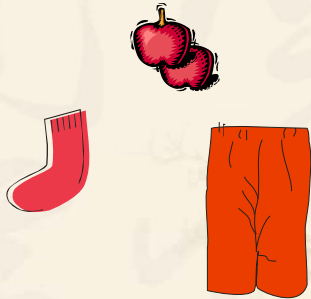
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Theory of Variation (變易學習理論)



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Theory of Variation (變易學習理論)



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Using Learning Study as a tool to improving teaching and learning

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Theoretical framework of Learning Study

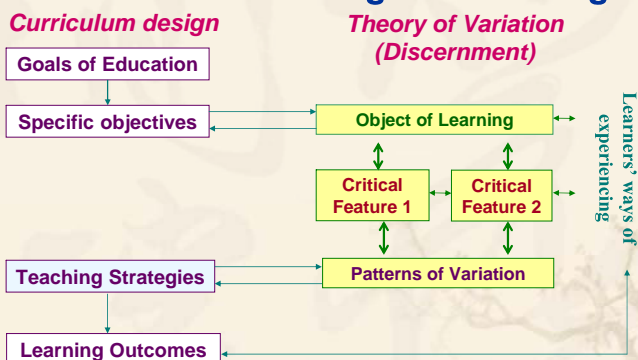
Focusing on the object of learning

It is guided by three types of variation=

- V1: Variation in pupils' ways of seeing the object of learning
- V2: Variation in teachers' ways of dealing with the object of learning
- V3: Using variation as a guiding principle of pedagogical design

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How does the learning theory help to enhance teaching and learning?



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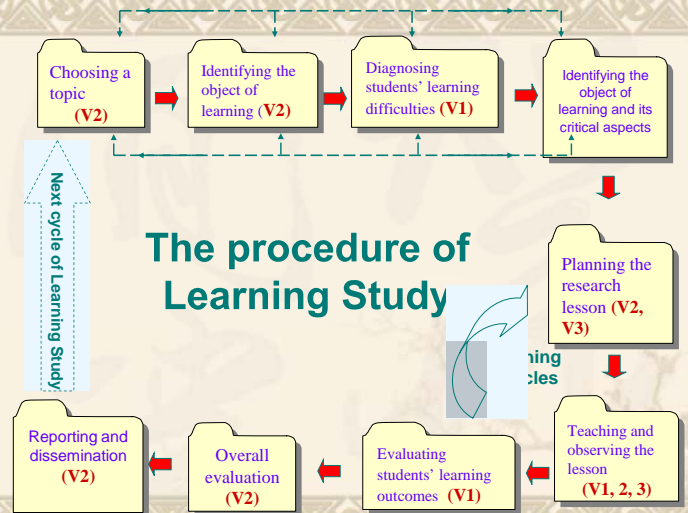
The role of the teacher is to consciously structure learning experiences that help pupils to discern the critical aspects identified for the object of learning.

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What is Learning Study?

- ❖ *Draws inspiration from the process of enquiry into teaching and learning by Japanese and Chinese teachers.*
- ❖ *Employing action research methodology.*

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In what ways can Learning Study help to achieve the reform goals?

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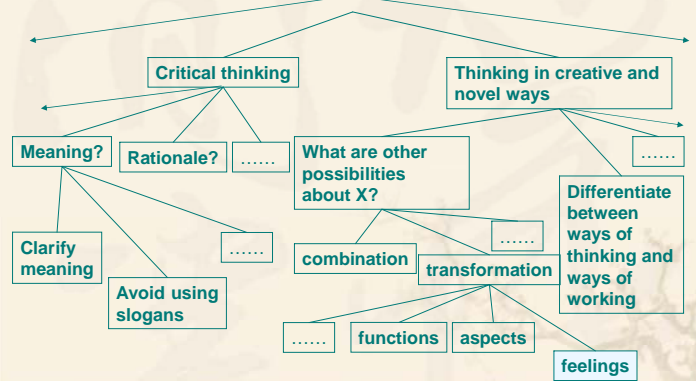
Direction of the Reform

- To build an education system focusing on all-round development and **life-long learning**
- To enhance the knowledge, abilities and attitude of all students, and the priority is to enable our students to **enjoy learning, to communicate effectively, and to develop their sense of commitment and creativity**
-



http://www2.hkedcity.net/citizen_files/ab/at/we2001/photo_album/200309/154801/page1.jpg

Creativity (敢於創新)



取材自1999年3月25日李天命先生於香港大學通識講座：《思考》，郭永賢整理。 26

Creative writing



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1. Achieving goals through paying attention to the general aspect of the object of learning

☞ "If you want to improve teaching, the most effective place to do so is in the context of a classroom lesson. If you start with lessons, the problem of how to apply research findings in the classroom disappears." (p.111)

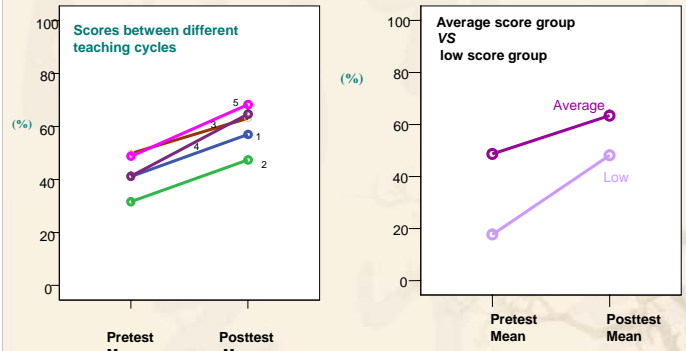
☞ James W. Stigler & James Hiebert (1999) *The Teaching Gap*

We may not be able to achieve all the educational goals in one lesson, but a lesson at least should be a part of the whole process to achieving these goals.

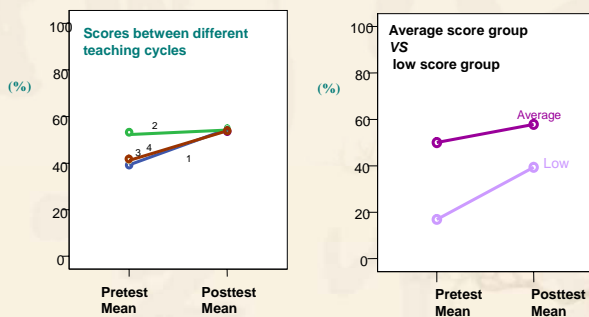
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2. Catering for individual differences through narrowing the gap between the high score group and the low score group in terms of the core elements of the curriculum

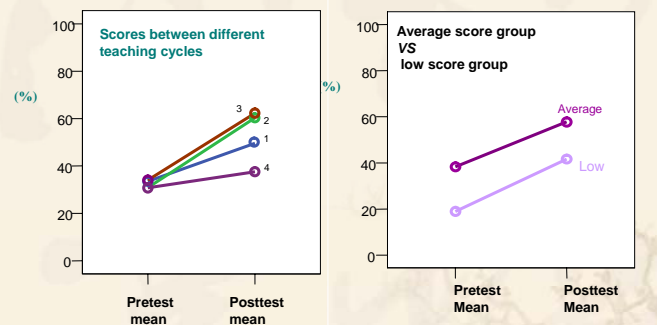
VL007 – F1 Chinese



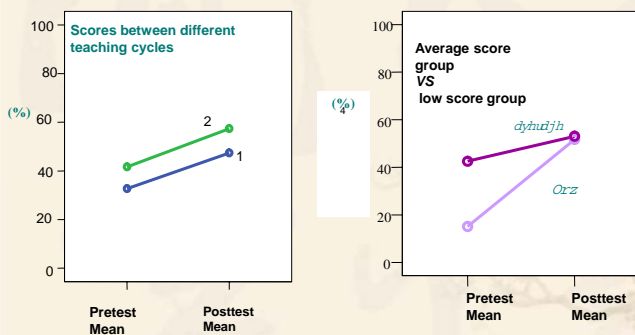
VL011 – Primary English



VL008 – Primary Mathematics



VL005 – F4 Chemistry



This **challenges** the traditional view of

- ❖ High academic achievement = high ability ?
- ❖ Low academic achievement = low ability ?

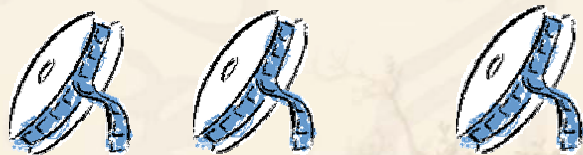
It is possible for students to achieve the **same threshold standard** (basic core element required for advancement) irrespective of their starting points.

3. Opens up the space of learning to make possible the development of all students – not just the higher ability ones

Capability to build on previous knowledge to solve novel problems



Demonstration of meta-learning by students – pointing to possible future development at helping students learn to learn



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Frqwzivw0FDO

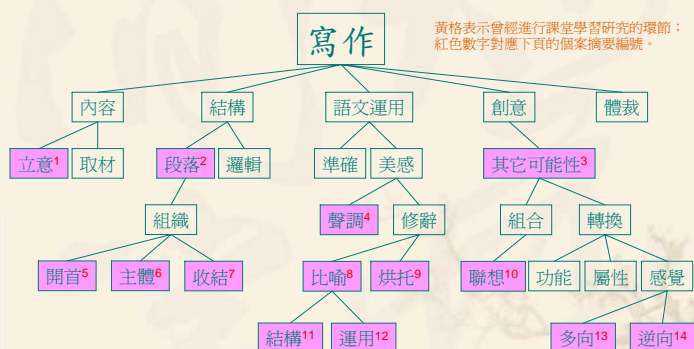
ixvlrq

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4. An evidence based approach to school-based curriculum development

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Evidence based approach to SB-CD in Chinese



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5. Impact on teachers' professional development

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PIPS Project Teachers' surveys- Sustainability of Learning Study

strongly agree/agree

Have become more focused on the objects of learning and critical features	95%
More sensitive towards student's learning difficulties	91%
Keen to take part in collaborative work, such as lesson observation and analysis, within their school	90%
Using improved skills to assess students for better teaching and learning	86%
Able to build variations into their lesson content and teaching approaches	68%

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PIPS Project Impact of Learning Study on teachers' performance and the culture of the school- comments received from Principals

strongly agree/ agree

Improved the effectiveness of collaborative planning in schools	100%
Enhanced the overall teaching ability of their teachers	97%
Brought about a better atmosphere for lesson observation in schools	97%

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VITAL Project

Impact on Teachers

Teachers' reflections

課堂學習研究的確是令我終身受益的經驗。
^YO 33; - W4`

課堂學習研究能有效地提升學生的學習，也能帶動老師的積極性。 ^YO 33; - W5`

整體上來說，此學習模式確能提升學生的學習興趣，增加學生的思考能力，而老師亦能對教授的內容有更深刻的認識，共同備課及互相觀課能提升老師的教學效能。 ^YO338 - W4`

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VITAL Project

Teachers' reflections

Wkh YlwoSurnfw l p hdqIqj ixodqg xvnxo... lwsuryIghv wkh rssruwqIw| iru rxu frondjxhv wr frp p xqIfdwh z lk hdfk rkhul ^YO33; - ISX 4`

Wkh Surnfw Iqghhg hqdedv wdfkhw wr hqkdqfh wkhlu surihvIrqdodeIw| I d vxwIdIqdedh p dqghul ^YO33; 0 ISX 5`

Wdfkhw fdq xqghuwIdqg d arwp ruh derxwkh sxsIv` dnduIqj gIhIfxwIhvI^YO33; - ISX 6`

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Principals' comments

課堂學習研究能帶動同事的積極性。 ^YO33 ; - S4`

此研習活動的校內彙報，能向全體老師做推廣和推薦；鼓勵各科在已有的共同備課活動外，同時時間到課堂去觀察實際教學時出現的問題，並作檢討，籍此實現老師在教學上的專業提升。

^YO038 - S5`

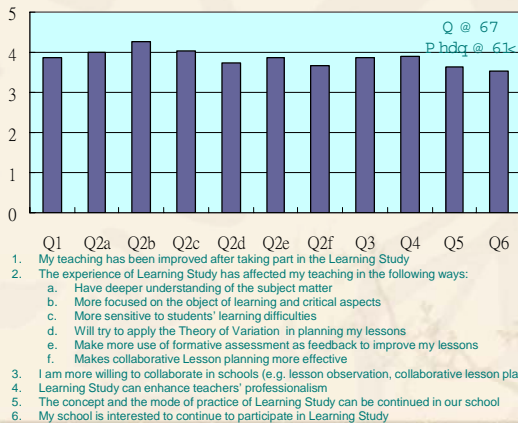
Survey on Impact of Learning Study (VITAL Project)

Principal – Teacher questionnaire

(5-point Likert scale used)

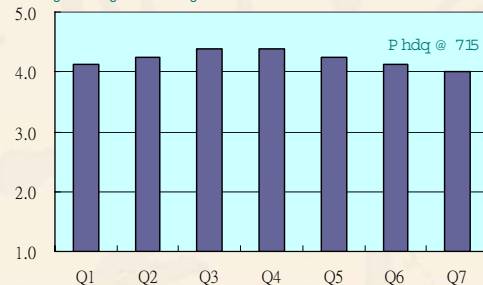
Return from 7 out of 12 schools

Survey on 'Effect of Learning Study' – Teachers' Questionnaire



Survey on 'Effect of Learning Study' – Principals' Questionnaire

- After taking part in Learning Study, the overall capability in teaching of teachers has been enhanced
- Learning Study brought about a better atmosphere for lesson observation in schools
- Learning Study improved the effectiveness of collaborative lesson planning in schools
- Learning Study helped to enhance the teachers' professionalism
- The concept and the mode of practice of Learning Study can be continued in our school
- My school is interested in continuing to participate in Learning Study
- I am planning to use Learning Study as a mean for teaching professional development and enhancing teaching and learning.



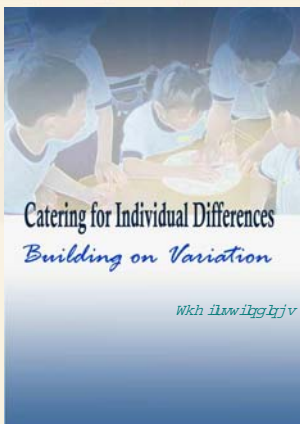
Summary:

We need to challenge some of our taken for granted assumptions which are preventing us from achieving the reform goals.

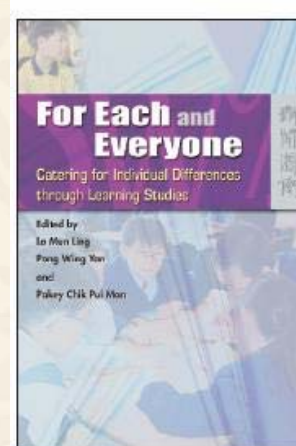
Focusing on the object of learning	V.S.	Focusing on teaching approaches
Ways of seeing		Innate ability
The teacher's role as directional		Non-directional
Catering for individual differences through discerning critical aspects and opening up the space of learning		Ability streaming and differentiated curriculum
Linking long term and short term goals		Focusing on them separately
Learning to learn through encouraging meta-learning		???

Learning Study is not an end in itself.

It is like an exercise, doing it makes you educationally and professionally more healthy.



Lo, Pong & Chik (Eds.) (forthcoming). *Catering for individual differences – building on variation. Making use of Learning Study.* HKSAR: HKU press.



The end

Thank you!