E-enhanced Learning, Teaching and Assessment System for SENs to learn effectively by a Systematic approach to mainstream education

S.E.L.T.A.S

A Joint-school Project called SELTAS

Revised on 2011/11/11

Training Schedule

Duration	Schedule
10 minutes	Development of SAME curriculum
10 minutes	SELTAS Concept
15 minutes	SELTAS' s System Framework
10 minutes	Teacher-Supported Demonstration
10 minutes	Blended Learning and e-Learning Demonstration
15 minutes	Crucial Elements for the Project Development
20 minutes	Q and A session

Revised
on 2011/11/11

Collaborating Parties of the E-learning Project

Centre for Advancement in Inclusive and Special Education

Modern Educational Research Society Ltd.

S.E.L.T.A.S Development

S.A.M.E Community

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Background of the S.A.M.E Community

The solid ideas of development of SELTAS

1. **Since 2006**, a joint university-school project on a curriculum approach that gives students with learning difficulties to access the general curriculum.
2. The Joint schools Project is called SAME which stands for "Systematic Approach to Mainstream Education"
3. The SAME is led by the Centre of Advancement in Inclusive and Special Education of the HKU (one of our collaborator in this project)
4. **From 2006~2011**, there are **11** special schools participating in the SAME project.

2006 → 2014 onwards

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Products of the SAME Project (From 2006~2011)

Curriculum Guides Supplements

SCALE (Assessment for Learning Effectiveness)

schemes of work

2006 ⟷ 2014 onwards

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on 2011/11/11

Products of the SAME Project (From 2006~2011)

1. A series of **Curriculum Guides Supplements** for all KLAs
2. Written graded attainment scales and level descriptors for each strand of the Key Learning Areas from the very low level of attainment to that of an average Primary 3 child.
3. An **assessment package called SCALE** (Assessment for Learning Effectiveness) was produced and released in 2009 and has been used by the alliances of SAME for end-of-year school-wide assessment.
4. A series of "**schemes of work**" have been produced , which will provide a solid and common base for teachers for planning their lessons to match:

- The learning needs
- Attainment levels
- Learning patterns of their students.

2006 → 2014 onwards

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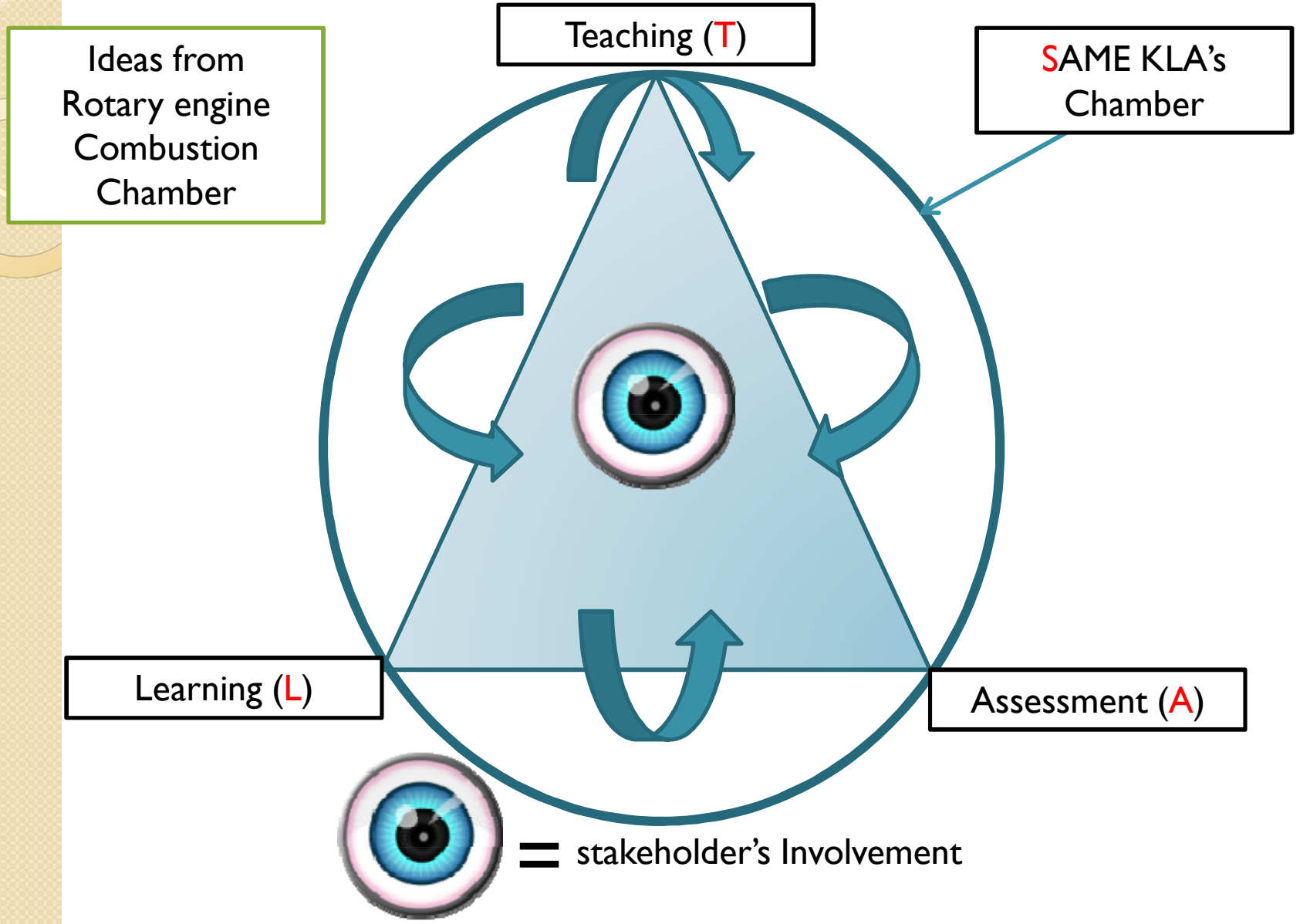
SELTAS System Framework



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SELTAS System Framework

Developmental Vision of the System and the Project:

•Enhance the Learning, Teaching and Assessment by a systematic approach to mainstream

Objectives:

•Design is based on the methodology of Blended Learning and the SAME curriculum approach.
•Student centered Learning and Teaching Platform
•Educational Cloud computing :

1. **S**ervice **O**riented **A**rchitecture (allow all users to access them, including those who use assistive technologies)
2. Creation
3. Collaboration
4. Files and Data Sharing

•Inclusive Education-supported
(S.A.M.E Curriculum and SCALE assessment)
•Teacher-supported
•Student-supported
•Tracking of learning behavior

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Blended Learning Methodology

Blended learning refers to
•a mixing of different learning environments.

•combines traditional face-to-face classroom methods with more modern computer-mediated activities.

•This learning strategy creates a more integrated approach for both instructors and learners.

•a blended learning approach, technology will be more important.

Different media

varying pedagogical approaches

mix of theoretical with practical work

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Blended Learning Methodology

Under the Seltas System, we have to consider:

- The role of facilitator
- The pattern changes of Teacher Preparation
- **Differentiated instruction** involves "custom-designing instruction based on student needs

Different media

varying pedagogical approaches

mix of theoretical with practical work

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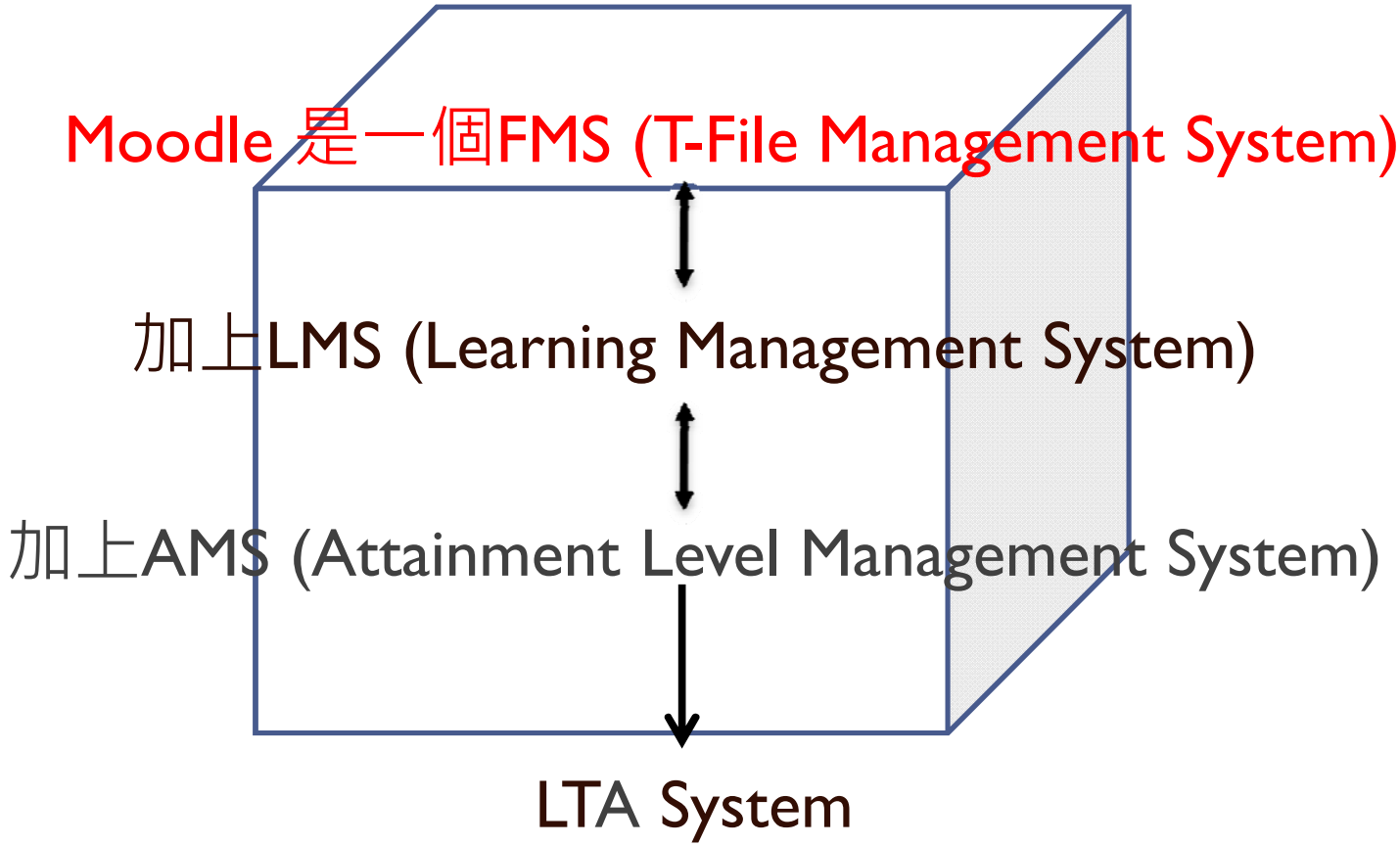
Evolution from the Existing System (Moodle)



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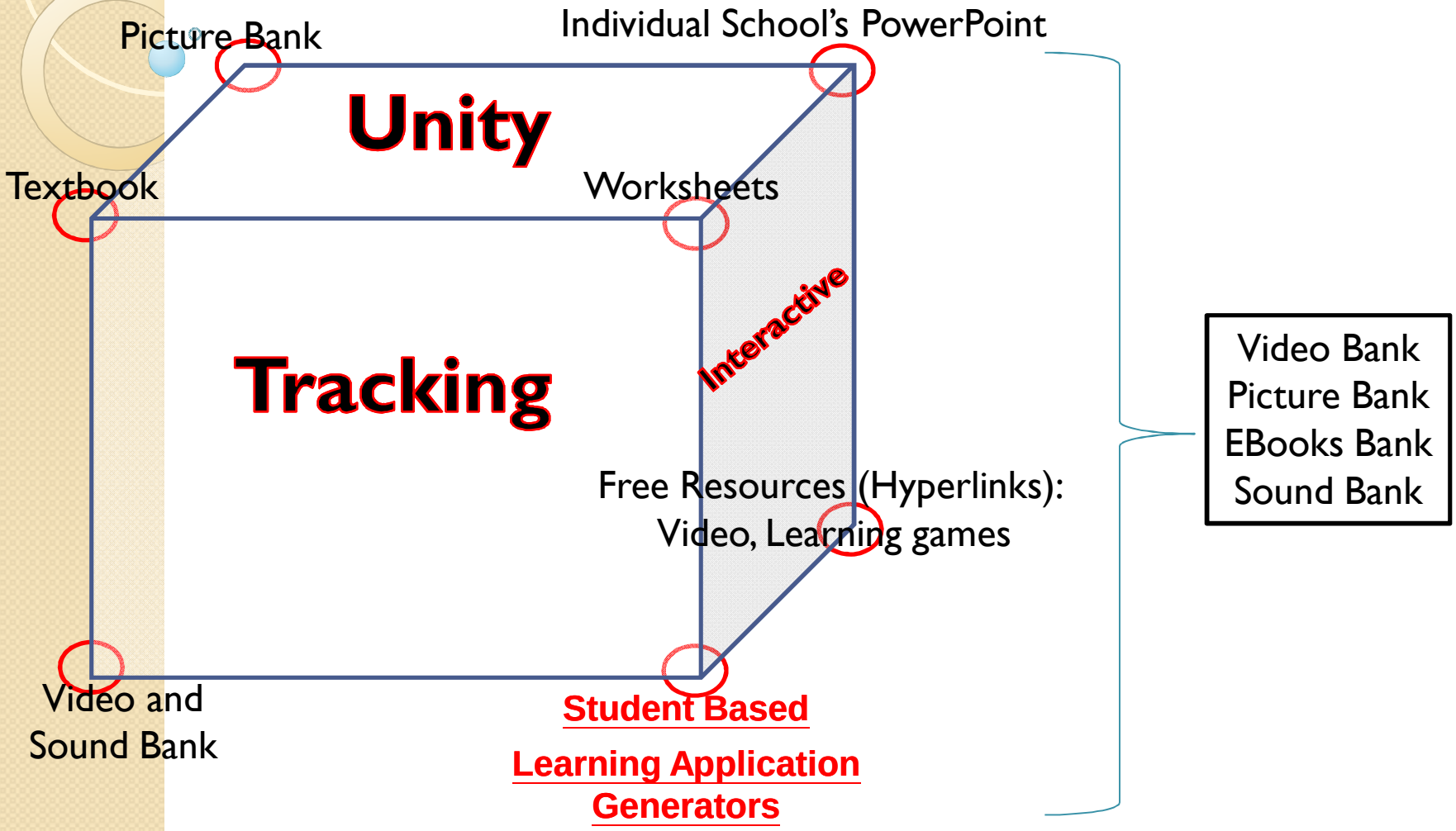
Characteristics(1)
Sharing of resources



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Characteristics(2)

Student Based

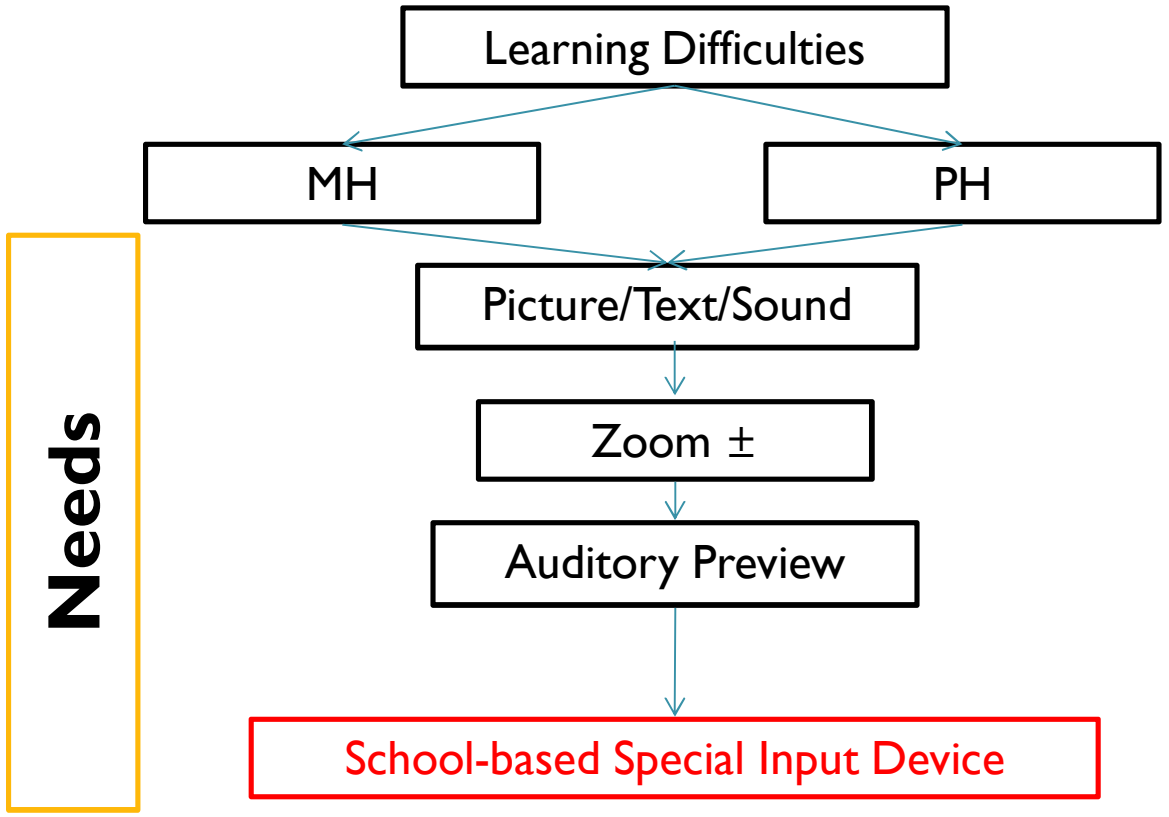
Learning Application Generators

- Photo Matching & Hunting
- Story Board (Role-Play Based)
- Picture based Multiple Choice
- Mind-mapping
- Flow Chart Ver.1 (Drag and Drop) & (Fill in the Blank)
- Flow Chart Ver.2 (Fill in the Blank) & (Formula choice)
- Photo Drag and Drop

→ Individual Log Book

Characteristics(3)

Human Factor's Consideration



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KLA's Unit Planning and try out

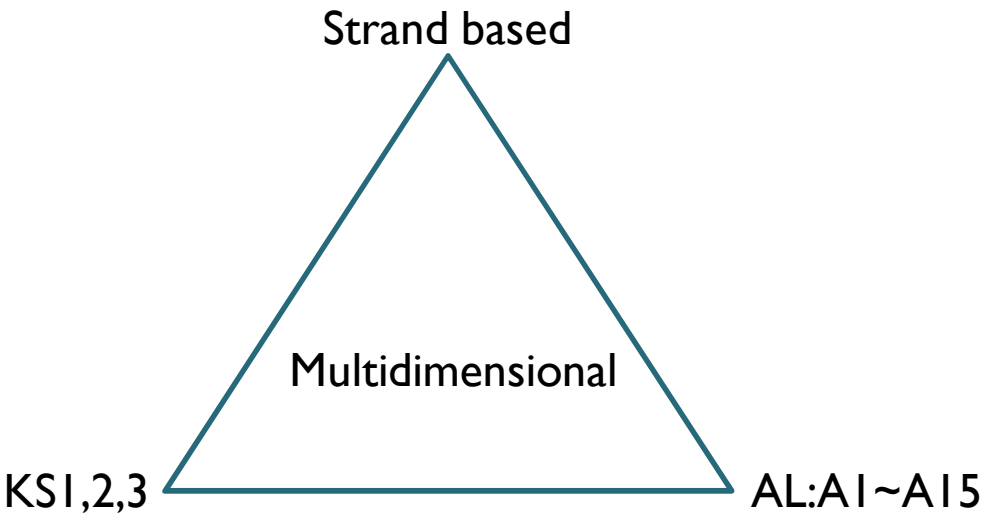
- First try out KLA: Chinese
  - 4 Strands Framework: SOW > Unit planning

    Σ=9units

Second try out KLA: PSHE

- 7 Strands Framework: SOW > Unit planning

  Σ=18units



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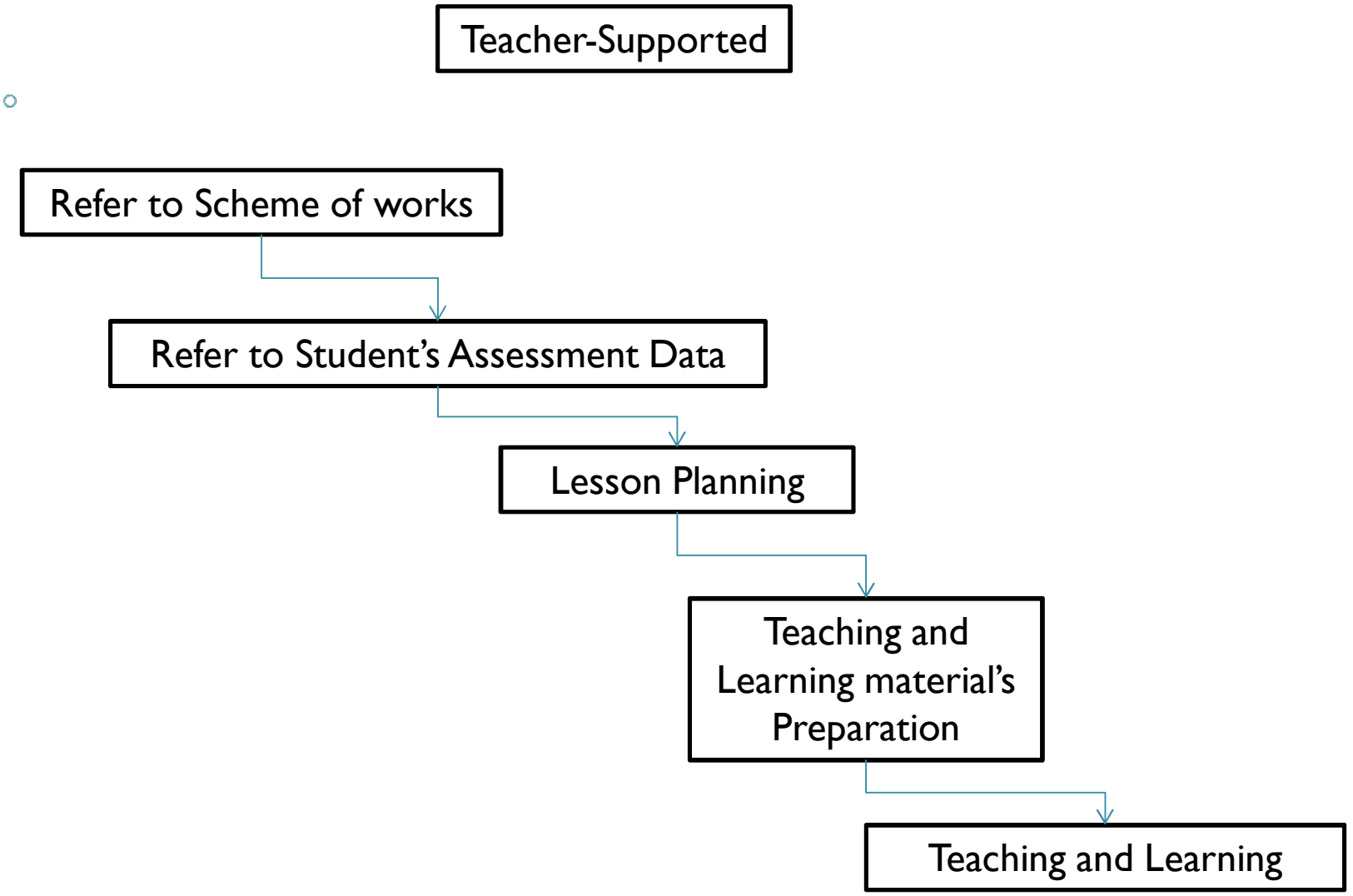
Prototype Demonstration(1)



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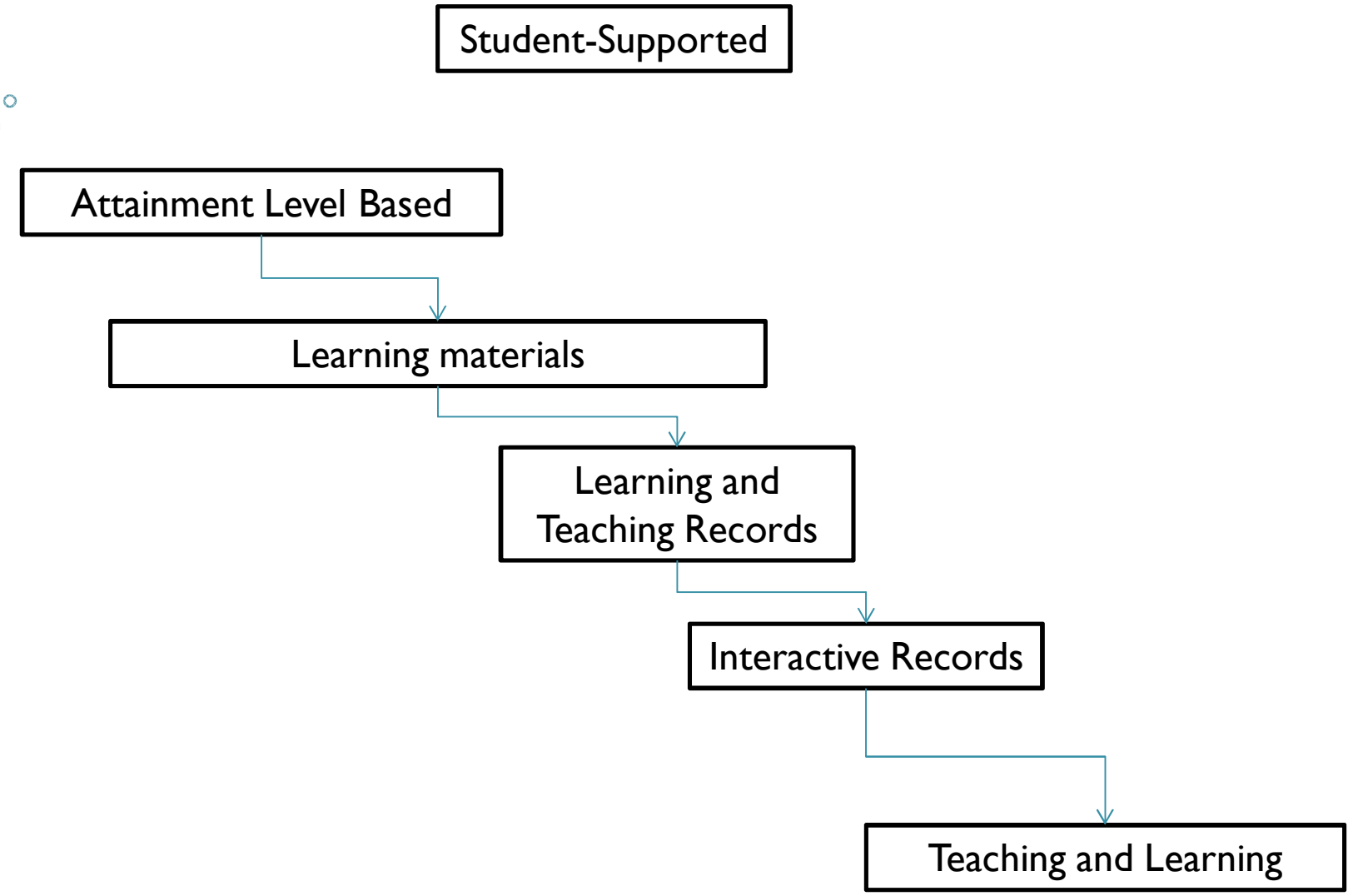
Prototype Demonstration(II)



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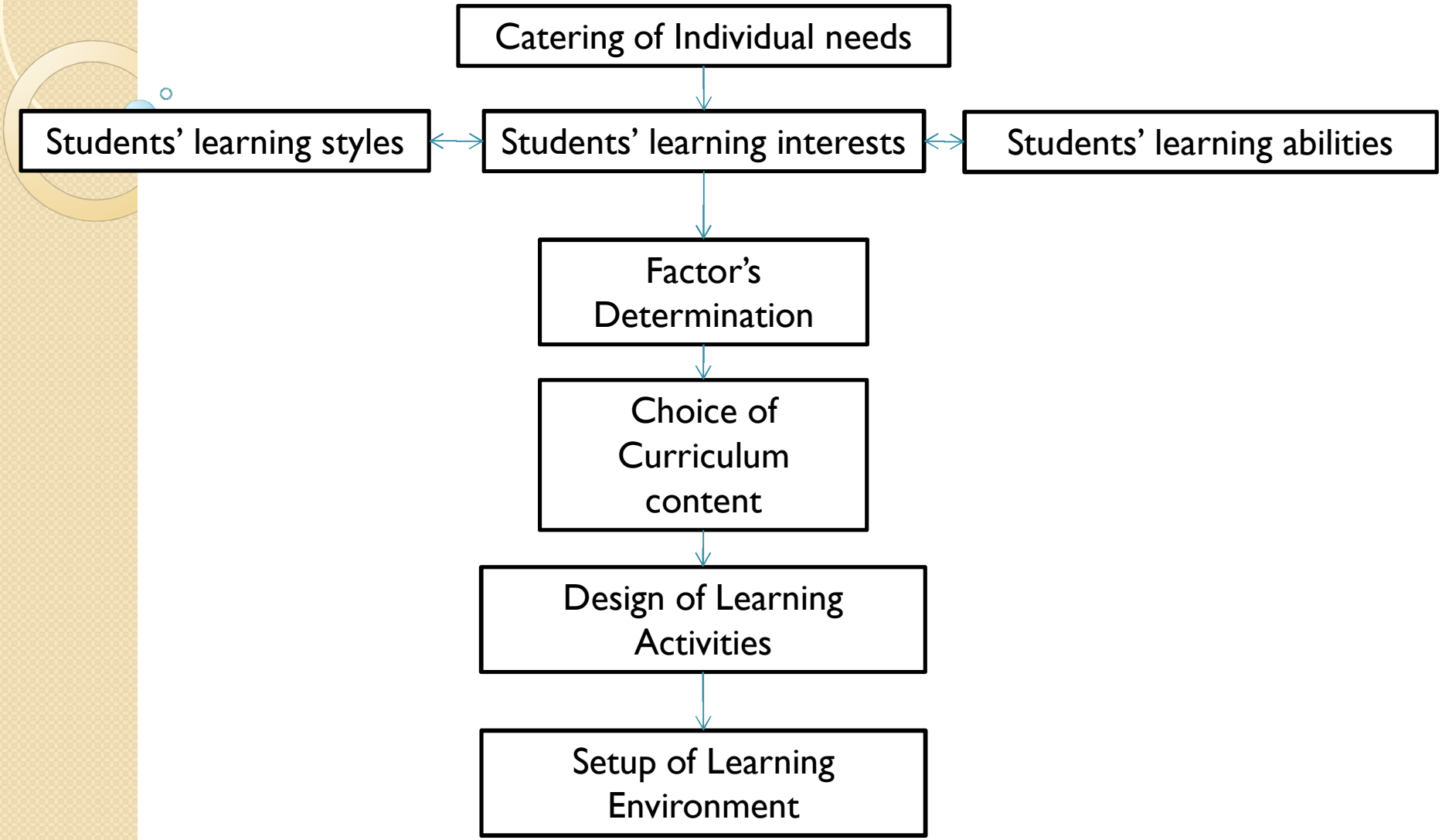
Prototype Demonstration(III)



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Crucial Elements (I)

Assistive Technology and I.T. facilities enhancement in every schools

Assistive Technology:

- Technology used by individuals with disabilities
- Prevent the situation of perform functions that might be
- Assistive technology can include hardware, software, and peripherals that assist people with disabilities in accessing information technologies.

For example:

- people with limited hand function may use a keyboard with large keys or a special mouse to operate a computer
- people who are blind may use software that reads text on the screen in a computer-generated voice
- people with low vision may use software that enlarges screen content

Crucial Elements (I)

Assistive Technology and I.T. facilities enhancement in every schools

I.T. facilities:

•Backbone (bandwidth)

•Computing Machine:

1. Touch Pad
2. Tablet
3. Mobile Devices
4. PCs
5. Net Book/Notebook…etc

• Input Devices

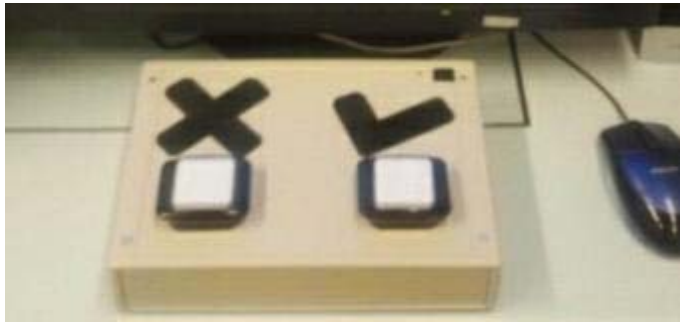
1. Touch Monitor
2. Interactive Whiteboard
3. Assistive Input devices…etc

• Output Devices

1. Screen Reader
2. Projector
3. Large LCD Screen…etc

Crucial Elements (I)

Assistive Technology and I.T. facilities enhancement in every schools



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Crucial Elements (I)

Assistive Technology and IT facilities enhancement in every schools

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Crucial Elements (I)

Assistive Technology and IT facilities enhancement in every schools

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Crucial Elements (II)

Standard Alignment of Teacher Preparation

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Crucial Elements (III)

Staff Development:
Teacher's and IT coordinator's roles in the project

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Q and A

Presenters:

- CAISE representative:
  Mr. Andrew Tse
- Yeung Yat Lam Memorial School representatives:
  Principal: Mr. Chan Keung Kai
  Teachers: Mr. Ng, Mr. Cheng and Miss Lee
- Contractor:
  Mr. Cho

Link for this presentation:
www.yyl.edu.hk

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