

# Research & Development Projects for Developing the New Senior Secondary Curriculum for Students with Intellectual Disabilities

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18 June 2009



15<sup>th</sup> Anniversary  
教大理想 共創未來  
Leading in Education  
Inspiring Learning

# Objectives of the R&D projects

- ❖ Evaluate the draft adapted **Curriculum Frameworks (NSS(ID))** and learning outcomes of the core & elective subjects with data suitably collected for revision;
- ❖ Collect examples of planning, recording and assessment materials and student responses from schools;
- ❖ Provide data for the development of the **Learning Progression Framework** of the core subjects that suit the assessment of students with ID; and
- ❖ Provide **Supplementary Guides to Curriculum & Assessment Guides** for students with ID with illustrative/annotated examples to show appropriate curriculum planning, effective learning and teaching, assessment instruments, and quality learning and teaching materials.

# Major Tasks

## NSS-ID Curriculum for students

### Curricular Documents:

- Develop supplementary guides on Core and Elective subjects
- Develop Learning & Teaching examples

### Professional Development Programmes:

- Subject knowledge
- Learning Progression Framework for Core Subjects
  - Pedagogy
- Curriculum management and adaptation

### Learning Outcome Framework (LOF):

- Chinese Language
  - Mathematics
- Liberal Studies/ Independent Living

### Seed Project:

- Try out the adapted curriculum
  - School visits
- Collect Student Learning Data
  - Sharing good practices

# NSS(ID) Curriculum + Learning Progression Framework (LPF)

**Curriculum Framework (CF)**



**Learning Progression Framework (LPF)**



**Supplementary Guides (SG)**

# Developing an Outcomes Focused Approach

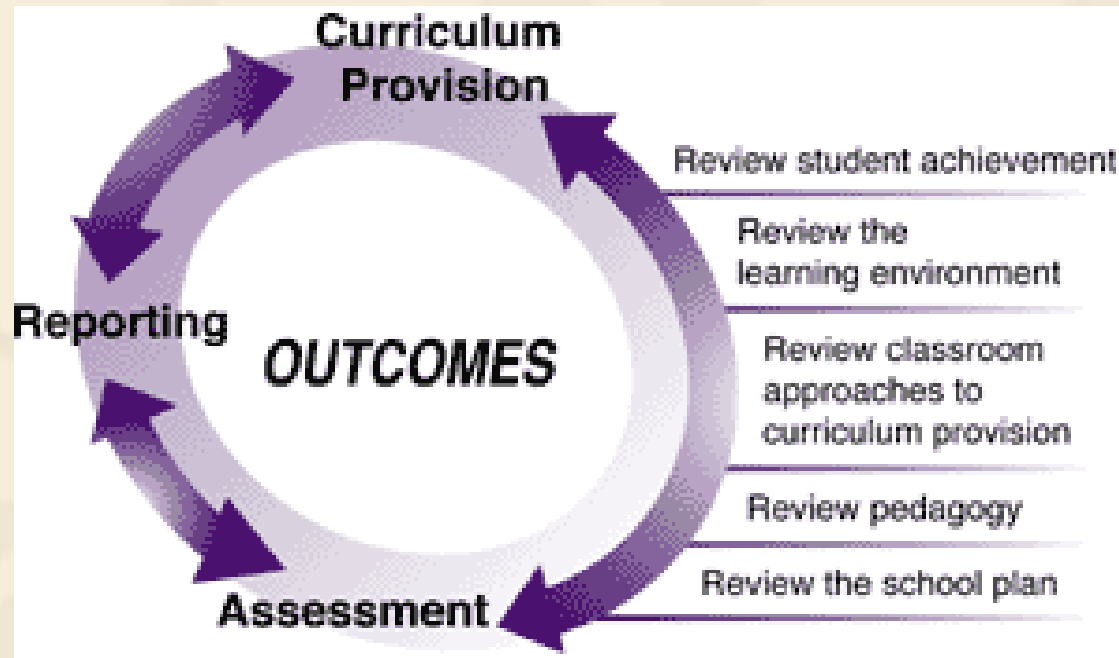
## Fundamental Underpinnings:

- ❖ **All** students can learn
- ❖ **All** students can achieve outcomes in a range of domains
- ❖ The **needs of ALL students** can be addressed through use of appropriate outcomes
- ❖ **ALL** students should be able to be mapped against the LPF at a level of achievement within a developmental zone



# Outcomes Focused Education

1. Establish expected outcomes
2. Identify where each student is at in respect to outcomes
3. Plan experiences to develop the outcomes



The focus on outcomes is in **curriculum provision, assessment and reporting**

# Learning Progression Framework

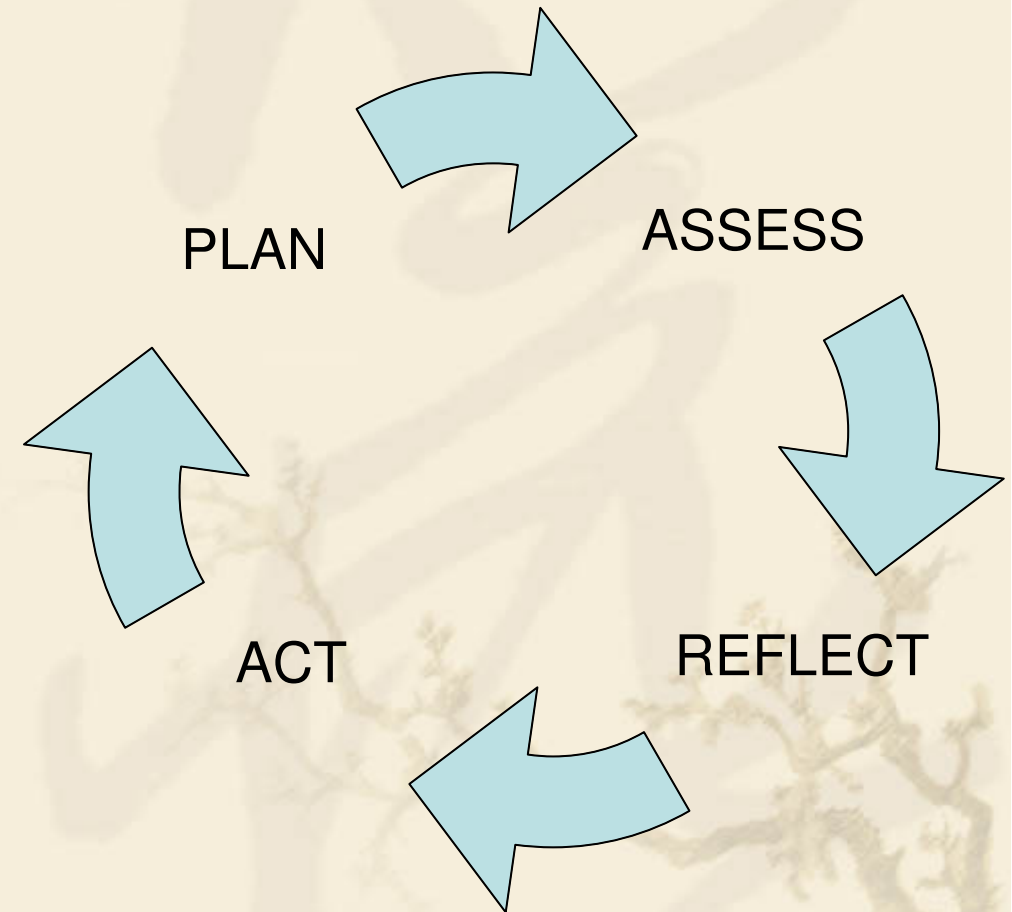
- ❖ Sets out what **ALL students** should know, value & be able to do as a result of the programs they undertake
- ❖ It is **NOT** a curriculum or a syllabus
- ❖ It **IS** a framework for identifying common learning outcomes for all children
- ❖ Schools should use the **LPF to develop programs** based on their own circumstances, ethos & student needs
- ❖ **Informs & supports** curriculum provision, assessment and reporting consistent with a student's need

# Learning Progression Framework – NSS(ID)

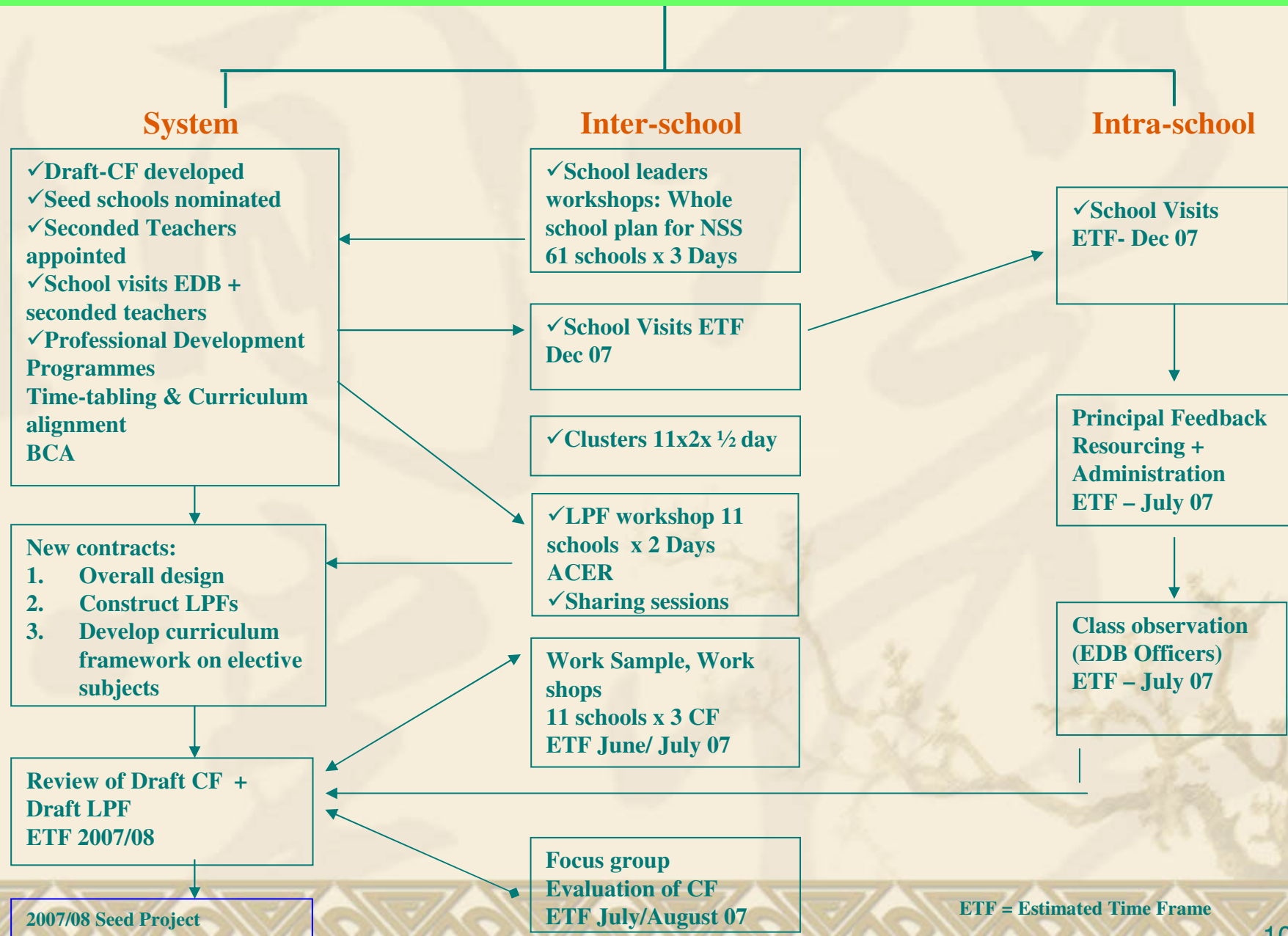
- ❖ Has been written specifically for students with intellectual disabilities
- ❖ Designed for students in the **New Senior Secondary** course
- ❖ **Precedes Mainstream levels**
- ❖ **Overlap in higher levels**
- ❖ **Theoretical framework Piaget stages of development & Blooms levels of comprehension**

# Assessing & Reporting Learning Outcomes

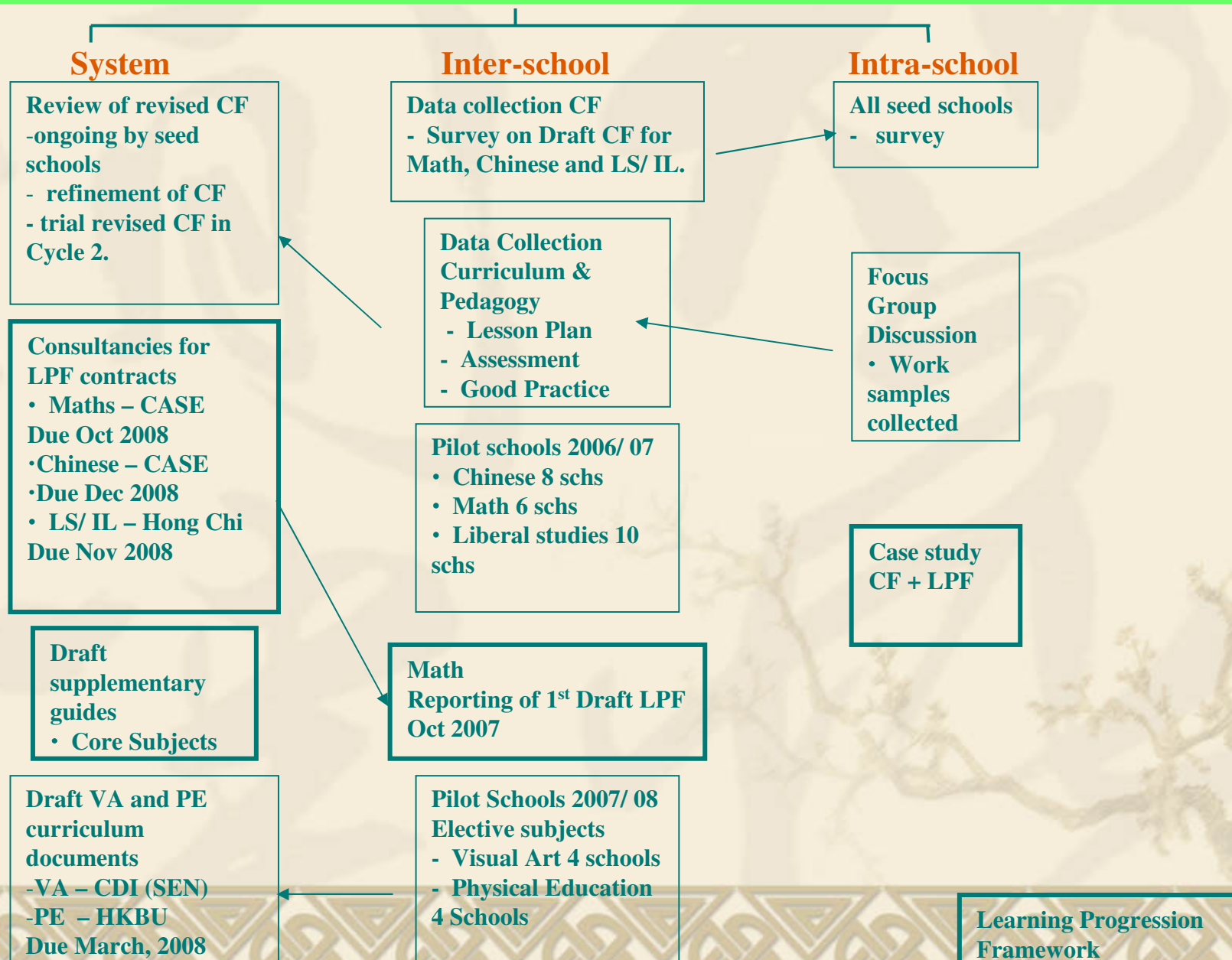
- ❖ Assessment embeds evaluation **in the context** of learning
- ❖ All students are profiled **using the same outcomes**
- ❖ Students are assessed **to identify the level they are working at**
- ❖ **Accommodations are provided**
- ❖ Reporting is generally **portfolio based**
- ❖ Students **engage in own learning**



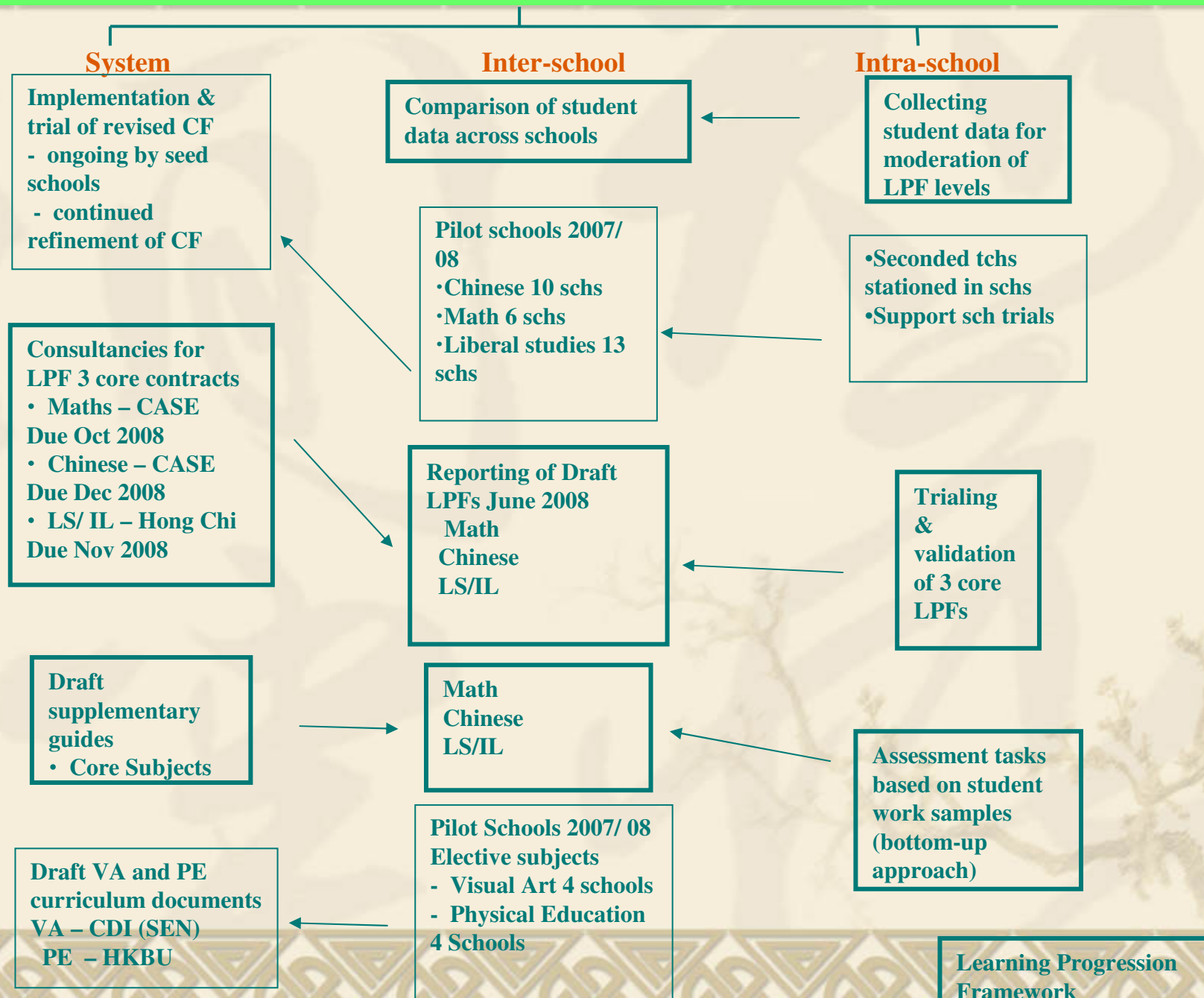
# Stage 1: Work Plan on Research & Development 2007



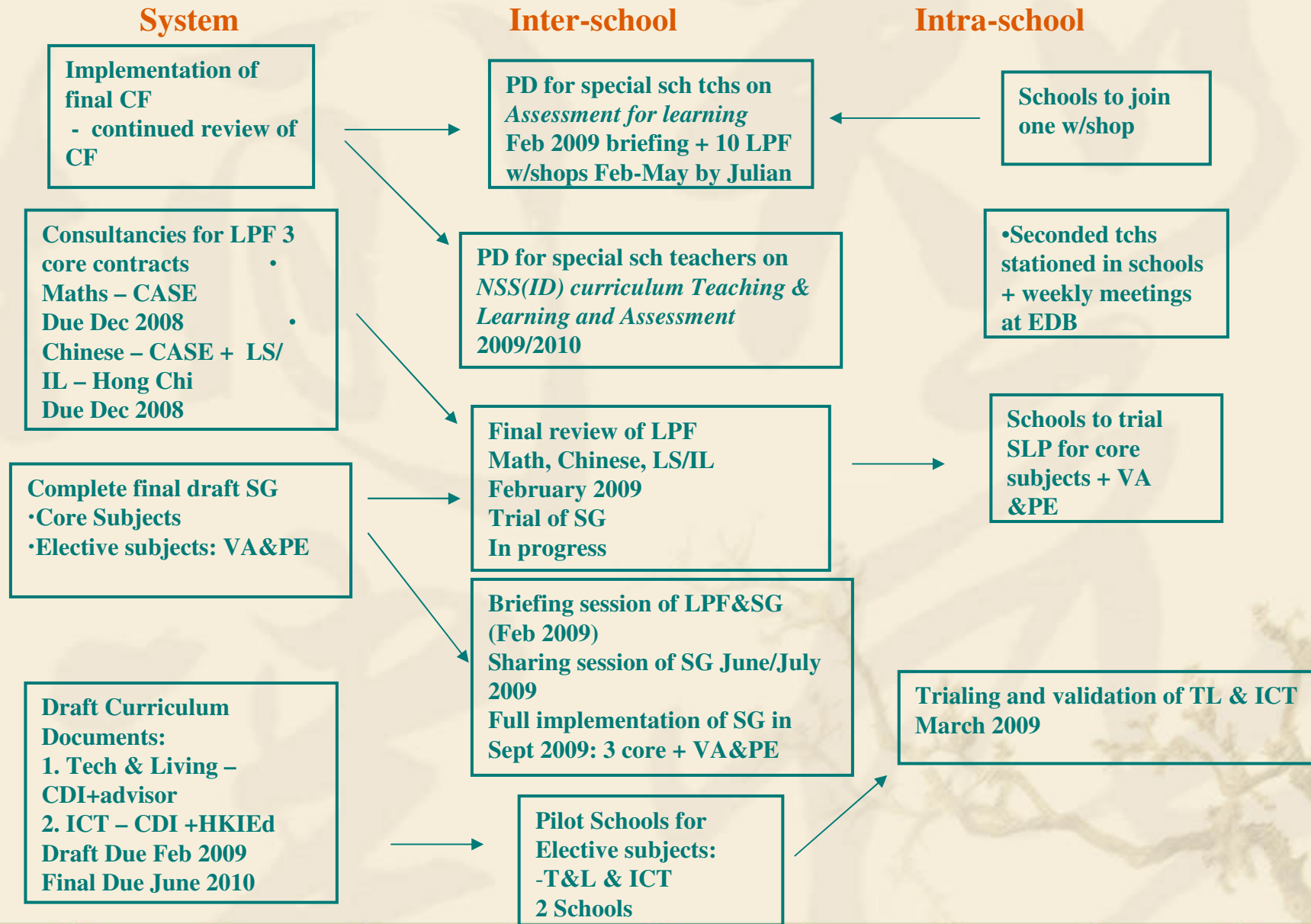
## Stage 2: Work Plan on Research & Development Jan-July 2008



# Stage 3: Work Plan on Research & Development Aug-Dec 2008

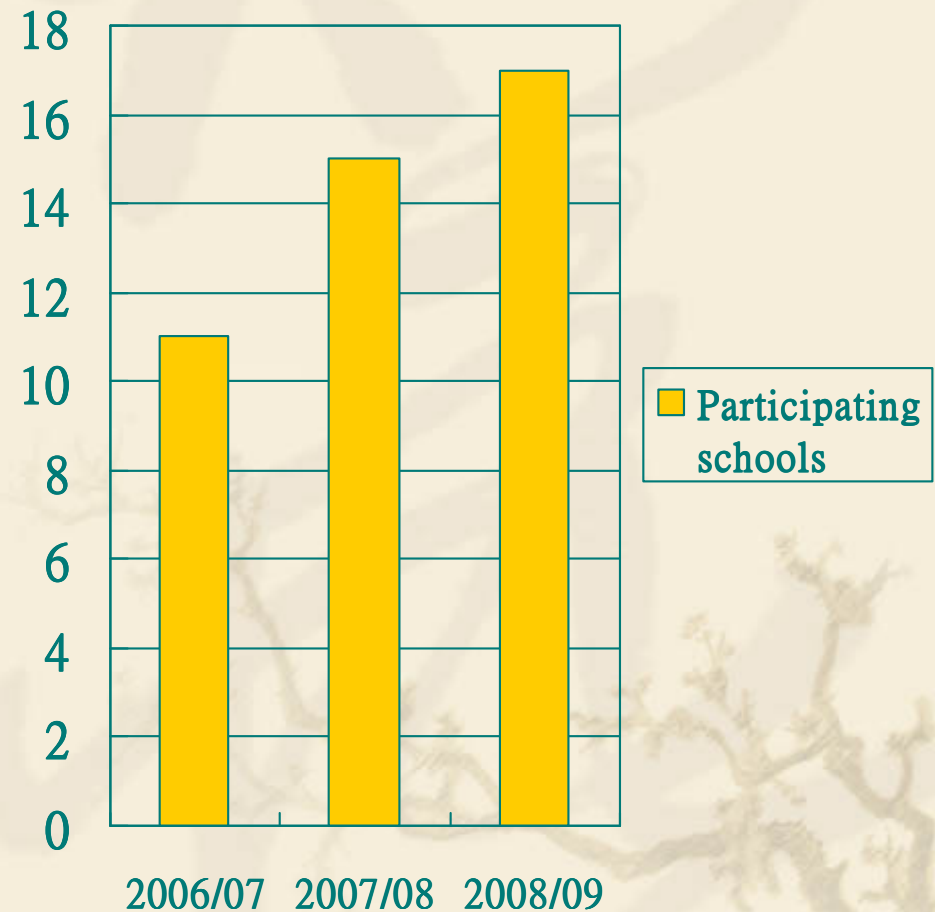


# Stage 4: Work Plan on Research & Development Jan-July 2009



# Seed Projects

- ❖ Increasing number of participating schools
- ❖ 34% joined the 2008/09 seed projects



# Seed Project (2008/09)

	SLM	Subject Meeting	Sch. visit	Trial run Sharing session	Sub. Briefing/ seminar/workshop/ presentation
Chi Lang.	3	4	2	2	1
Maths		2	2	1	1
LS/IL		4	2	3	1
PE		2	4	1	1
VA		3	4	1	2
ICT		7	3	1	1
T&L		6	3	2	1
<b>Total</b>			<b>28</b>	<b>20</b>	<b>11</b>

# Number of Participating Schools (Core Subjects)

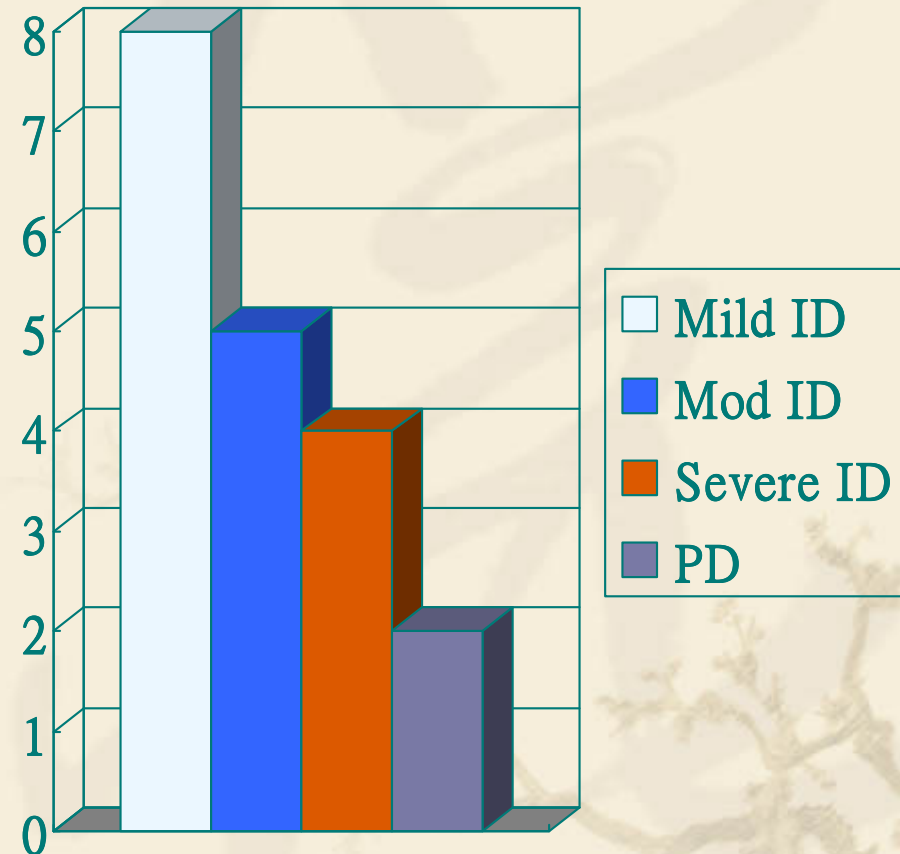
Subject	(2006/07)	(2007/08)	(2008/09)
Liberal Studies / Independent Living	10 schools (5 mild; 3 mod; 1 severe; 1 PD)	13 schools (6 mild; 4 mod ; 2 severe; 1 PD)	13 schools (5 mild; 1 mild/mod; 4 mod; 2 severe; 1 PD)
Chinese Language	8 schools (4 mild; 3 mod; 1 severe)	10 schools (5 mild; 3 mod; 2 severe)	10 schools (4 mild; 1 mild/mod; 3 mod; 2 severe)
Mathematics	6 schools (4 mild; 2 mod)	7 schools (4 mild; 3 mod)	7 schools (3 mild; 1 mild/mod; 3 mod)

# Number of Participating Schools (Elective subjects)

Subject	(07/08)	(08/09)
Visual Arts (VA)	4 schools (2 mild; 1 mild + mod; 1 PD)	4 schools (2 mild; 1 mild + mod; 1 PD)
Physical Education (PE)	4 schools (2 mild; 1 mild + mod; 1 severe)	4 schools (2 mild; 1 mild + mod; 1 severe)
Information and Communication Technology (ICT)		2 Schools (1 mild; 1 mod)
Technology & Living (T&L)		2 Schools (2 mild)

# School Visits (07/08)

- ❖ Total no. of participating schools: 19 (15 seed schools and 4 non-seed schools)
  - Mild ID: 8
  - Mod ID: 5
  - SID:4
  - PD:2
- ❖ Total no. of classroom observation: 122 lessons



# Professional Development Programmes

- ❖ Clustered School Leader Workshops: 5
- ❖ Middle Managers Workshops: 8
- ❖ Seconded Teachers Workshops: 13
- ❖ Professional Development Programmes on various topics, such as LPF, IEP: 30
- ❖ Seminars on Assessment for Learning: 15



# Strategic Planning Decisions

1. **Breadth of outcomes to ensure equity for all students with ID**
2. **Opportunity to Learn with appropriate accommodations**
3. **Structure for alignment of LPFs**
4. **Agreed number of outcome levels – developed in consultation across Maths, Chinese & LS/IL**
5. **Assessing & Reporting Outcomes**

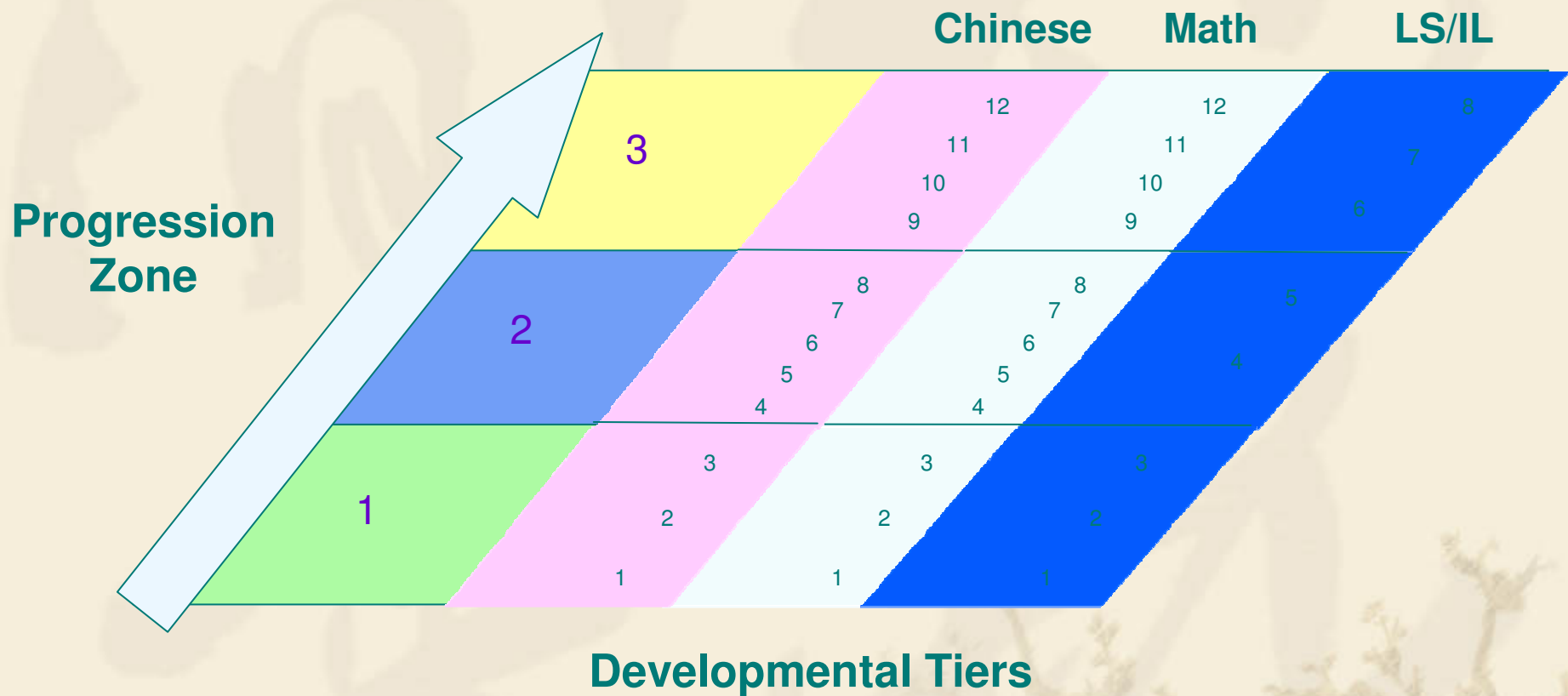


# Proposed LPF structure

## Number of levels

	<b>CASE</b> (Chinese Language & Maths)	<b>Hong Chi</b> (LS/IL)
<b>1st draft</b>	<b>15 levels</b>	<b>5 levels</b>
<b>2nd draft</b>	<b>12 levels</b>	<b>7 levels</b>
<b>Final draft</b>	<b>12 levels</b>	<b>8 levels</b>

# Progression Zones



**LPF > Strand > Progression Zone > Developmental Stage**

**Math > Number and Algebra (NA) > PL 1 > DS 2**

# Proposed structure for alignment of LPFs

**Strand:** Number and Algebra (NA)

**Level:** Level 1 (L1)

**Strand Level Code No. :** NA- L2.1

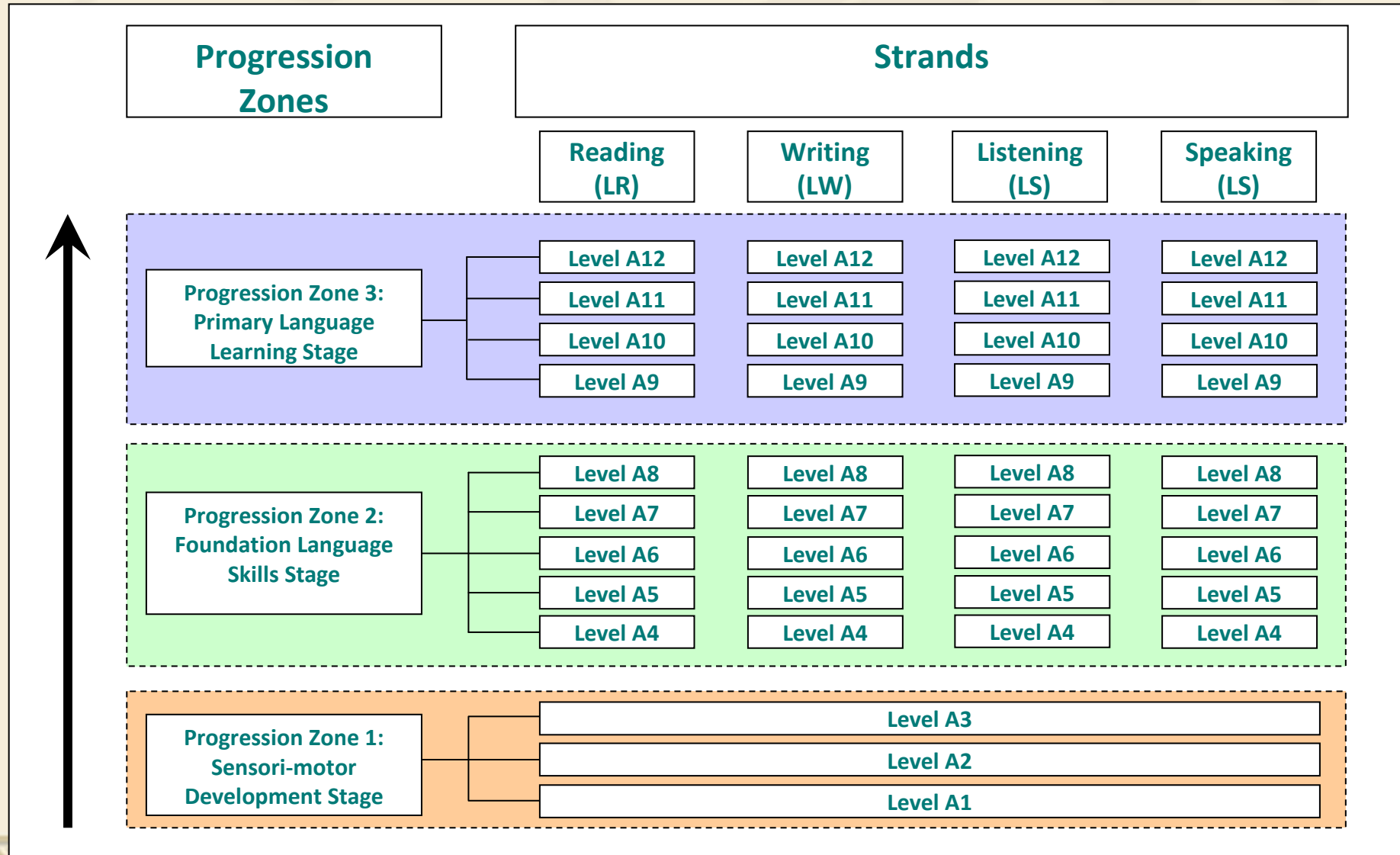
**Strand Level Statement:** Pupils shows learned habits that emerge into intelligent behaviour

**Strand Code No.:** NA-L2.1 (a)

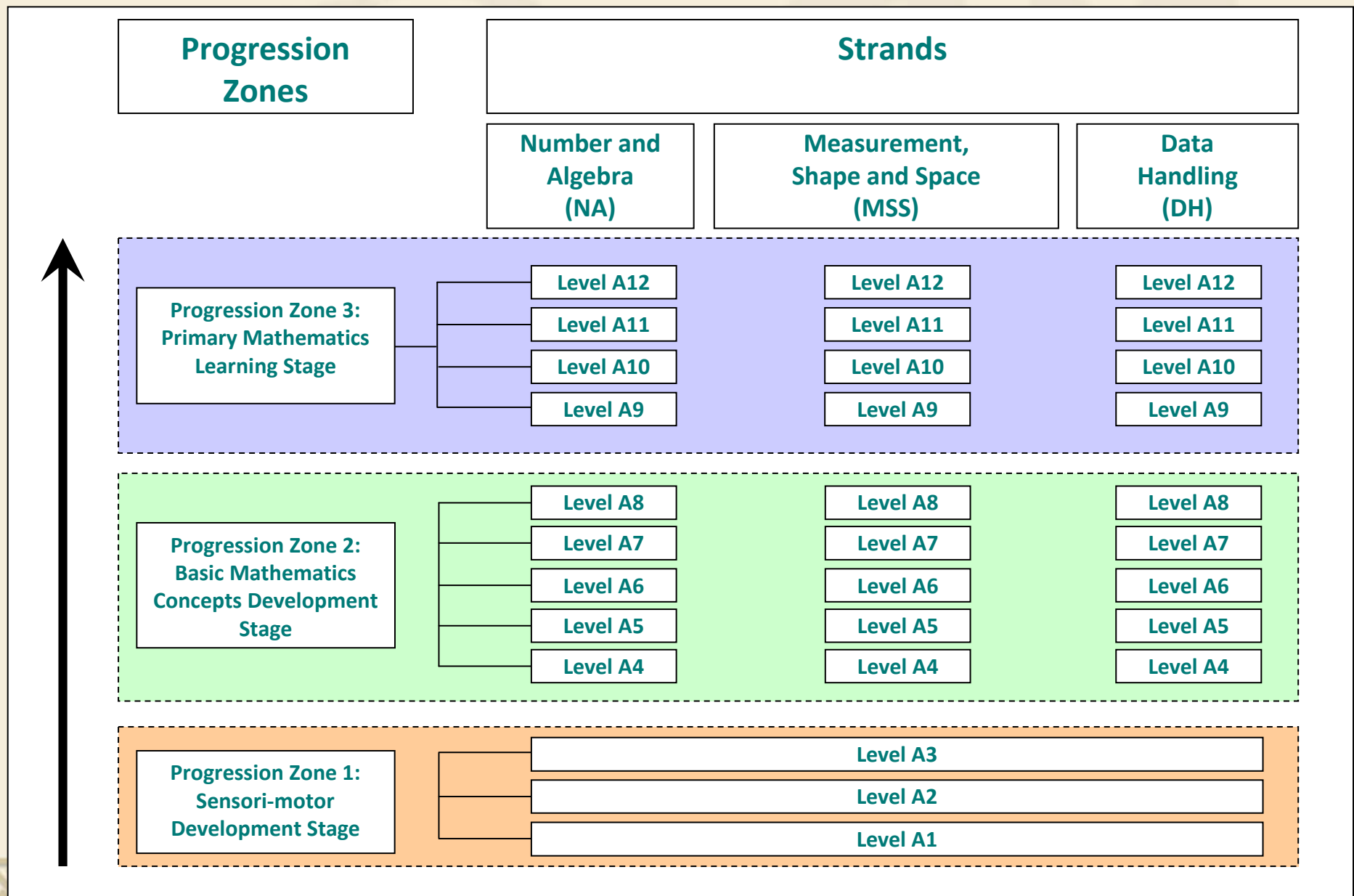
**Sub strand statement :** Pupil begins to respond consistently to familiar peoples, events and objects

Learning Outcome Code No:	Learning Outcome	Learning Outcome Exemplar(s)
NA-L2 (a).	Student accepts and engages in co-active explorations	<ul style="list-style-type: none"> <li>● Student follows an object of interest such as a colourful light when encouraged by an adult</li> <li>● Student moves briefly towards an adult indicating a desire for shared investigation</li> </ul>

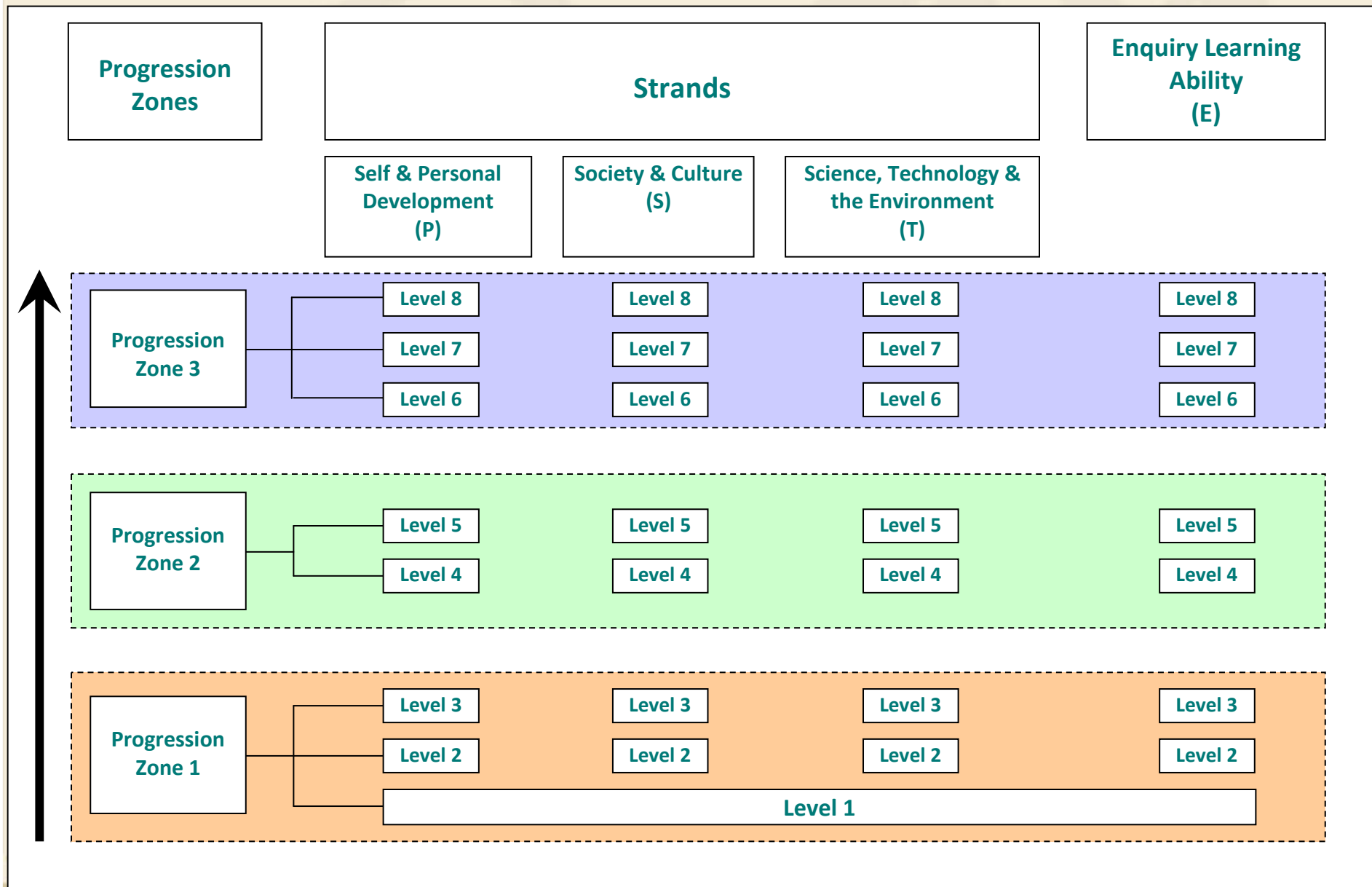
# Progression Zones—Chinese language



# Progression Zones—Mathematics



# Progression Zones—LS/IL



# Current Situation: 3 Core

## ❖ Mathematics

- **CF completed**
- **Draft LPF completed**
- **supplementary guides completed (available on the EDB website in June 2009)\***

## ❖ Chinese Language

- **CF completed**
- **Draft LPF completed**
- **supplementary guides completed (available on the EDB website in June 2009)\***

## ❖ Liberal Studies/Independent Living

- **CF completed**
- **Draft LPF completed**
- **supplementary guides completed (available on the EDB website in June 2009)\***

**\*The SG are to be used as a reference document for schools to develop their own curriculum**

# Current Situation: Electives

## ❖ Physical Education

- **CF completed**
- **supplementary guides completed (available on the EDB website in June 2009)**

## ❖ Visual Arts

- **CF completed**
- **supplementary guides completed (available on the EDB website in June 2009)**

## ❖ Information & Communication Technology

- **Draft CF completed**
- **supplementary guides due June 2010**

## ❖ Technology & Living

- **Draft CF completed**
- **supplementary guides due June 2010**

# Supplementary Guides

為智障學生而設的  
中國語文課程及評估補充指引  
(中四及中六)

香港特別行政區政府教育局  
課程發展處特殊教育需要組  
二零零九年二月

為智障學生而設的  
數學課程及評估補充指引  
(中四及中六)

香港特別行政區政府教育局  
課程發展處特殊教育需要組  
二零零九年二月

為智障學生而設的  
通識教育科課程及評估補充指引  
(中四及中六)  
- 通識教育/獨立生活

香港特別行政區政府教育局  
課程發展處特殊教育需要組  
二零零九年二月

為智障學生而設的  
體育課程及評估補充指引  
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香港特別行政區政府教育局  
課程發展處特殊教育需要組  
二零零九年二月

為智障學生而設的  
視覺藝術課程及評估補充指引  
(中四及中六)

香港特別行政區政府教育局  
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# Observations

## Improvements in teaching and learning strategies:

- ❖ Teachers adopted enquiry and co-construction approach in teaching
- ❖ Teaching strategies, such as flexible grouping, presentation-discussion-reconstruction, experiment, open-ended questioning technique, and peer-tutoring etc. are being used

Direct Instruction	Enquiry Approaches	Co-construction Approach
<ul style="list-style-type: none"><li>➤ whole class teaching</li><li>➤ teaching facts</li><li>➤ closed questions</li><li>➤ Drilling</li><li>➤ teacher-chosen resources</li><li>➤ tell-show-do</li></ul>	<ul style="list-style-type: none"><li>➤ heterogeneous grouping</li><li>➤ information searching</li><li>➤ issue-based learning</li><li>➤ open-ended questions</li><li>➤ student experience as learning materials and resources</li><li>➤ experiment</li><li>➤ field visit</li></ul>	<ul style="list-style-type: none"><li>➤ flexible grouping</li><li>➤ presentation-discussion-reconstruction</li></ul>

# Observations

## Improvements in teacher and student engagement

- ❖ Learning motivation,
- ❖ Curiosity,
- ❖ Teaching strategies,
- ❖ Interaction amongst students,
- ❖ Self-directed learning,
- ❖ Thinking skills,
- ❖ Presentation skills



# Evaluation on the R&D (seed) Project in 2008/09

- ❖ **March – August 2009 by Richard Byers**
- ❖ **Three schools will be targeted.**
- ❖ **Local groups will undertake interviews and Focus Group sessions.**
- ❖ **Seconded teachers will shadow students to observe outcomes.**
- ❖ **Initial findings presented on 11 June 2009**
- ❖ **Final report due end of August 2009.**
- ❖ **Results of the evaluation will be presented to all special schools in Sept 2009.**

# Next School Year 2009/2010

- ❖ Schools may use the CF to develop their own adapted curriculum.
- ❖ 1.9 teachers will be provided per NSS class for aided special schools for children with ID
- ❖ **Two new Seed projects identified**
  - ❧ **Project 1: 21 Seed schools to try out LPFs: Try out LPF for validating the Learning Outcomes**
  - ❧ **Project 2: 6 seed schools focus on either Music or D&T. Develop school-based curriculum & resources. Draft CF due in February 2010, then trial until July.**

# Key Issues

- ❖ Life skills should be integrated into subject knowledge
- ❖ Teachers need to be able to distinguish between levels & developmental zones
- ❖ The development of a system for moderation across schools to ensure consistency in use of levels
- ❖ Trialing & evaluation

