

# **Collaborative Research and Development (“Seed”) Projects for the 2021/22 School Year**

## **Fostering an “Entrepreneurial Spirit” through Whole-school Curriculum Planning**

Council & Secondary Section  
Curriculum Development Institute  
February 2021

# Fostering an “Entrepreneurial Spirit” through Whole-school Curriculum Planning

## Objectives

Promoting **whole-school curriculum planning** through sharing visions, reaching consensus, creating space and formulating actionable plans

Enhancing teachers’ professional competence in promoting **school-based curriculum development** with a view to fostering an “entrepreneurial spirit” in students

Promoting **cross-curricular collaboration** on conducting various learning activities to encourage students to make endeavours, take on challenges and innovate

Enabling students to define a problem and formulate plans for approaching it in a **life-wide learning** context


Encouraging creativity and iterative experimentation in the **problem solving** process to allow students to take **ownership** of their learning

Adopting appropriate and effective strategies to **evaluate/provide feedback** on students’ entrepreneurial competencies

Life-wide Learning

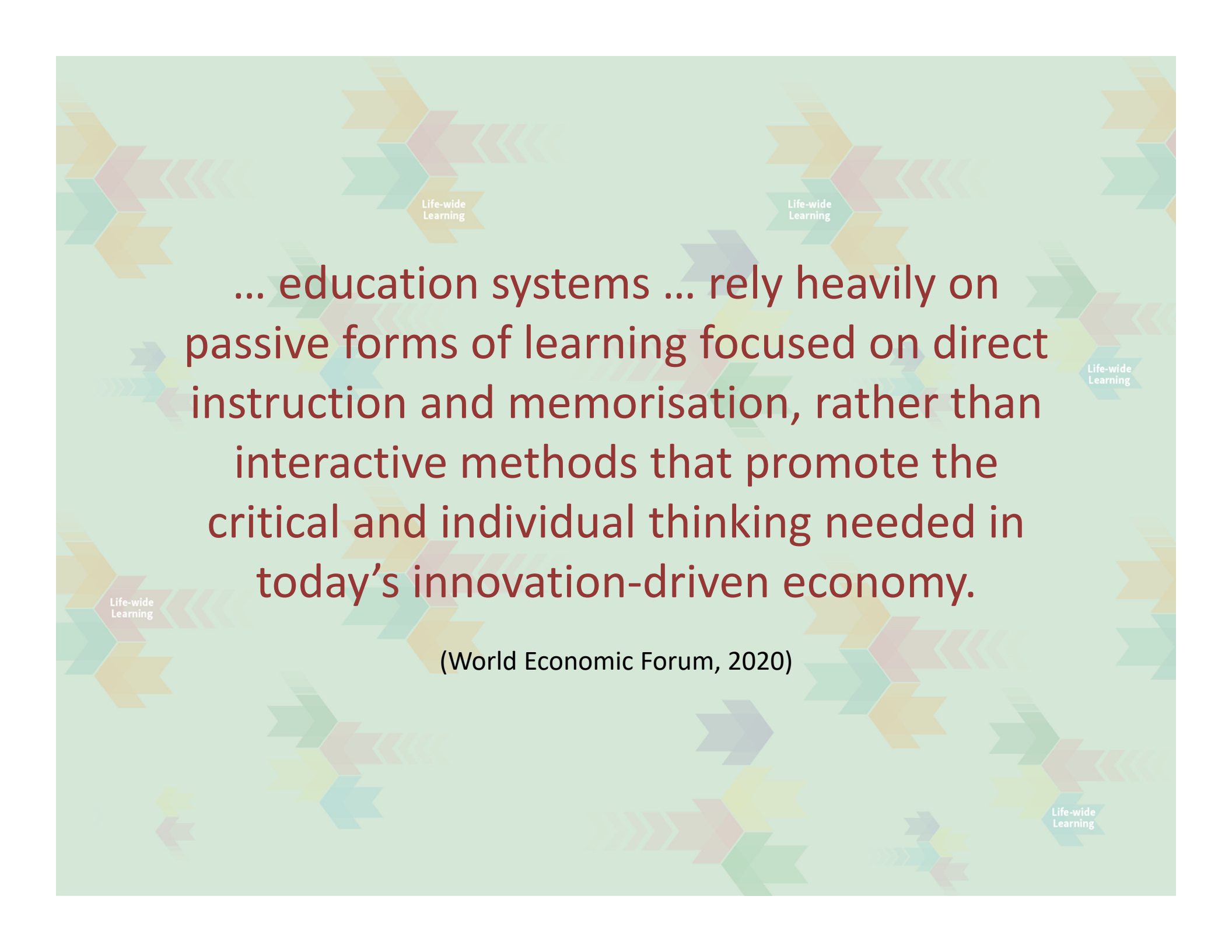
The background of the slide is a light green color. It is decorated with a repeating pattern of stylized, multi-colored arrows pointing in various directions. The arrows are composed of several overlapping chevron shapes in shades of yellow, orange, red, pink, teal, and light blue. Interspersed among these arrows are the words "Life-wide Learning" in a small, white, sans-serif font. The text is oriented horizontally and appears to be part of the background design.

**Are we preparing our students  
for the future?**



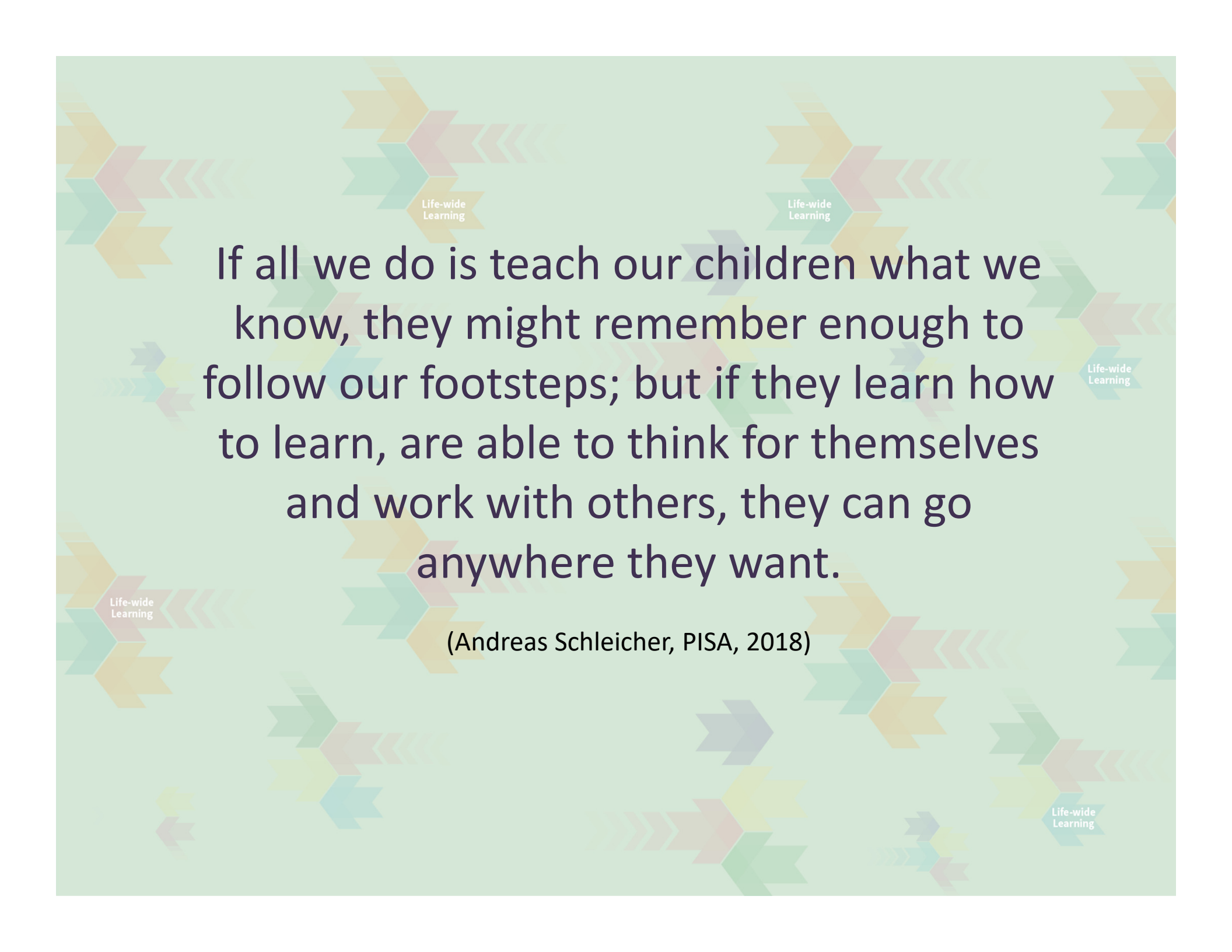
This revolution is already in homes across the developed world and increasingly in the developing world too. ... But, so far, this revolution has not transformed most schools or most teaching and learning in classrooms.

(Sir Michael Barber, 2014)

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... education systems ... rely heavily on passive forms of learning focused on direct instruction and memorisation, rather than interactive methods that promote the critical and individual thinking needed in today's innovation-driven economy.

(World Economic Forum, 2020)

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If all we do is teach our children what we know, they might remember enough to follow our footsteps; but if they learn how to learn, are able to think for themselves and work with others, they can go anywhere they want.

(Andreas Schleicher, PISA, 2018)

**TIME MANAGEMENT**

**COLLABORATION**

... high-stakes exams ... only measure  
a far narrower range of traditional  
performance ....

... if assessment systems fail to reflect  
the future skills that employers  
demand they will lose credibility  
naturally.

(Economist Intelligence Unit, 2017)

**ADAPTABILITY**

**CREATIVITY**

**PERSUASION**

**EMOTIONAL INTELLIGENCE**

# *How can we ...*

Life-wide  
Learning

Life-wide  
Learning

**develop in  
students the  
competencies  
required for  
meeting future  
challenges?**

**add variety to  
students'  
learning  
experiences and  
promote learner  
autonomy?**

**monitor and  
evaluate student  
learning in a  
real-life context?**

Life-wide  
Learning



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# **Why Entrepreneurship in Education?**

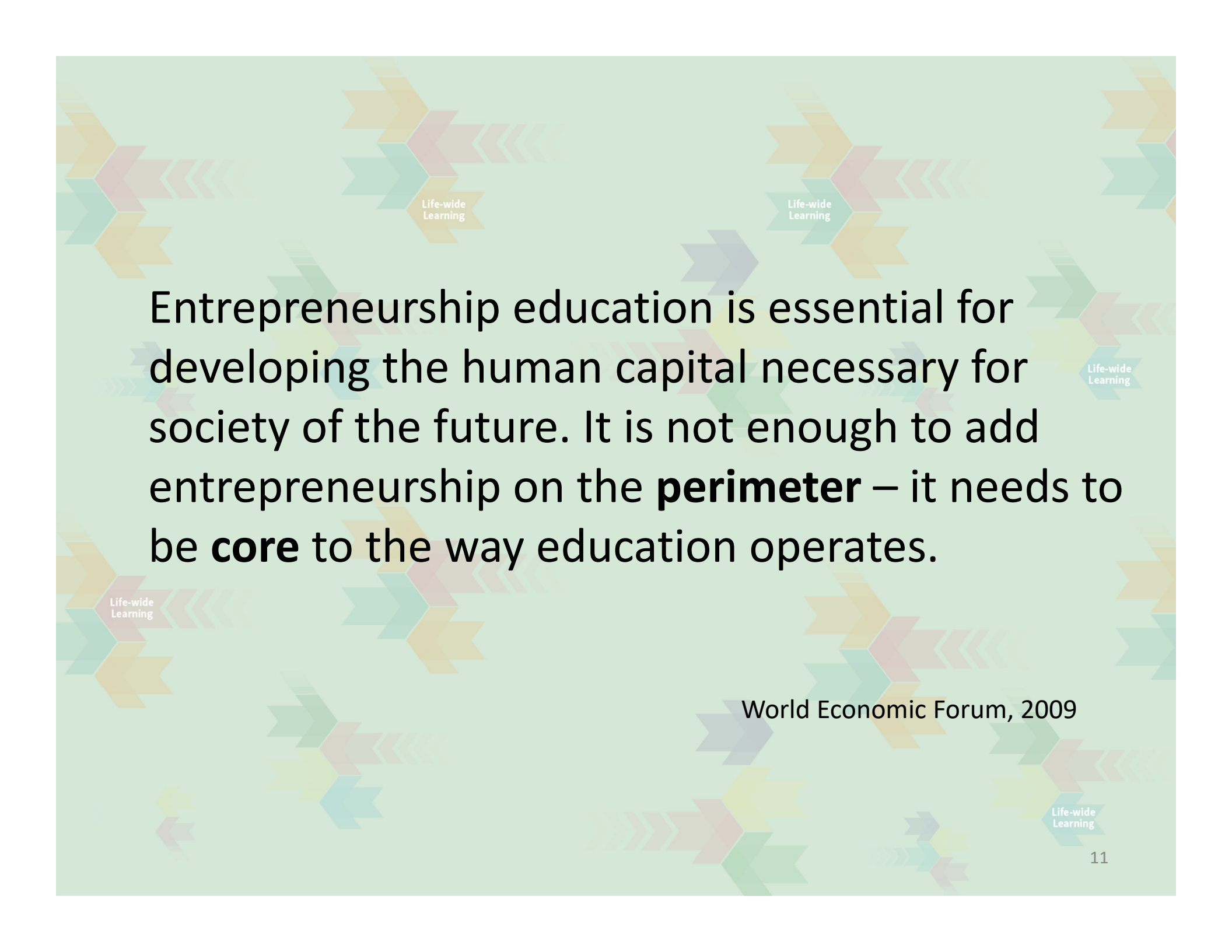
# Entrepreneurship in Education

## Develop personal qualities and attitudes

- Ability and willingness to take the initiative
- Innovation and creativity
- Willingness to take risks
- Self-confidence
- Ability to collaborate and social skills

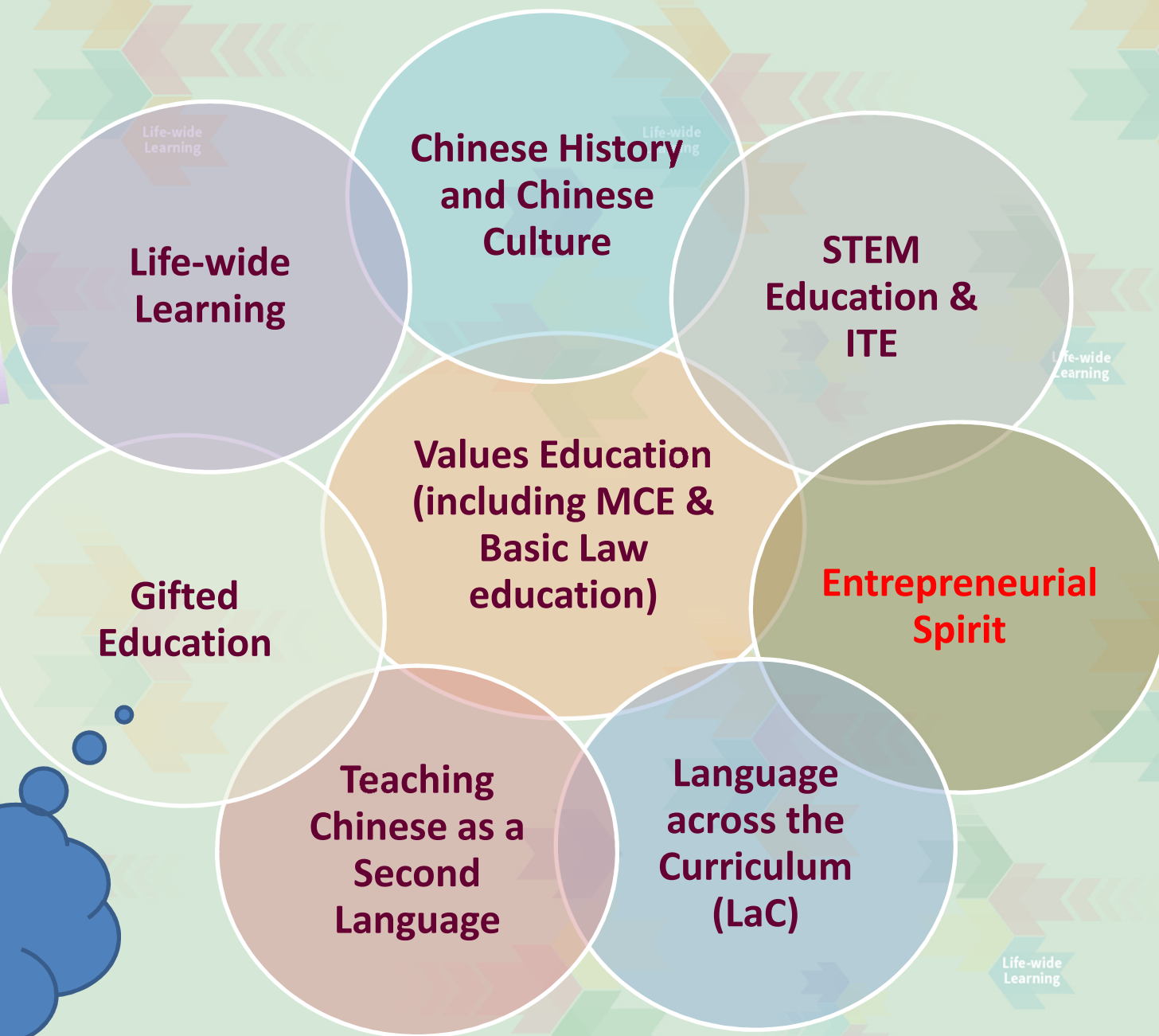
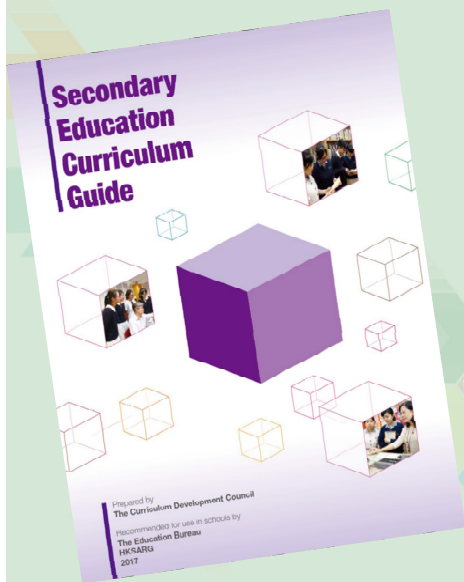
Learn **subjects and basic skills** through the use of entrepreneurial working methods

Learn **knowledge and skills** concerning business development and innovative process



Entrepreneurship education is essential for developing the human capital necessary for society of the future. It is not enough to add entrepreneurship on the **perimeter** – it needs to be **core** to the way education operates.

World Economic Forum, 2009



**Major  
Renewed  
Emphases**

# Development of an entrepreneurial spirit

- is not confined to teaching students to start and run new businesses;
- can focus on developing knowledge, generic skills, positive values and attitudes which will benefit students
  - in their personal development
  - as future endeavours as business owners, freelancers or innovators

(Secondary Education Curriculum Guide 2017)

## The premise of the Seed Project

- focuses broadly on the development of enterprise competencies that are essential in **the workplace**, and related to **personal development, mindset, skills and abilities**
- learners to demonstrate a 'can-do' confidence, a creative questioning approach, and the willingness to take risks in uncertainty and flexible working patterns
- learners to show the attributes of teamwork, initiative, originality and self-discipline.

## Entrepreneurship in Education

- builds the enterprise competencies and introduces **business competencies**, leading to **start-up** and **new business development**.

*OECD 2015; The Quality Assurance Agency for Higher Education UK 2018*

Life-wide Learning

Life-wide Learning



# **Developing Students' Entrepreneurial Spirit through Project Work**

# An Example

## Handicraft Making

Students to design and make household objects for the underprivileged



# Learning Opportunity: Addressing and Defining Problems through **DESIGN THINKING**

*Empathise*

- *Understand the users*

**Define**

- Develop points of view based on the users' needs

**Ideate**

- Propose creative solutions

**Prototype**

- Create designs underpinned by your thoughts

**Test**

- Test your ideas

# Learning Opportunity: **A CROSS-DISCIPLINARY APPROACH**

## Requisite knowledge, skills & attitudes

### Visual Arts

- Woodwork / pottery: historical and cultural value, techniques
- Aesthetic perception
- Artistic heritage
- Appreciation of Chinese arts

### Design & Technology

- Creativity / Innovativeness
- Problem Solving
- Self-determination
- Risk-taking

### Chinese History

- Learning about Chinese history and culture in the context of traditional handicrafts and everyday objects

### Languages

- Active listening in interview
- Drawing consensus in group planning



Students in teams draw knowledge from **different disciplines** and formulate **action plans** for design and make

# Learning Opportunity: Interaction with the **REAL WORLD**

Engagement with local  
craftsmen/practitioners  
in the creative industry



- Students learn more about innovative thinking and translating ideas into practice.
- Students **pitch** their creative output (e.g. tea ware) at a **real audience** as part of assessment.

**Interpersonal  
Skills**

**Marketing Skills**

# Nurturing Entrepreneurial Competencies: Possible Approaches

- Problem-based learning
- Planning a research, formulating hypotheses and predicting outcomes
- Analysing personal roles and responsibilities in making contribution to society

- Design thinking
- Connecting ideas using mind maps, imagery, analogies, etc., to create new possibilities
- Conducting a scientific investigation
- Making a prototype

## Opportunity Skills

- Recognising/acting on opportunities
- Asking questions about what is missing/what could be better
- Developing a vision

## Innovativeness

- Initiating new thoughts for action
- Expanding and refining ideas
- Discerning novelty from observation

## Marketing Skills

- Dealing with/persuading stakeholders
- Adapting a message to a target group
- Gauging people's needs

## Interpersonal Skills

- Interpreting, synthesising and appreciating various viewpoints
- Resolving conflicts

- Pitching
- Role-play
- Conducting a survey/interview
- Presenting ideas and viewpoints logically in different modes

- Sustaining a discussion
- Co-operative learning

Life-wide Learning

Life-wide Learning

## **Pedagogical considerations**

**Subjects involved**

**Real-life problems connected with subject curricula**

**Integrating design thinking into the learning process**

**Knowledge, skills & attitudes necessary for students to innovate**

**Range of possible student output**

**A meaningful platform for students to present their output**



# Project Implementation

# Commitment

- The seconded teacher to:
  - ✓ plan and implement curriculum initiatives through a whole-school approach and in alignment with the school context
  - ✓ direct and support cross-curricular collaboration
- **Space/flexibility** in curriculum planning and implementation
- Learning activities **within and beyond timetabled periods**
- Collection of evidence (e.g. classroom observations, interviews) on the process of change and impact of student learning
- Engagement with **outside organisations**
- **Dissemination of good practices** to other schools after the tryout





A **joint venture** between  
the School and the EDB

**Building on the  
strengths of the School**



# Application

- EDBCM No.4/2021 (Appendix B with Annexes 2 and 3; Appendix C)
- Deadline: 10 March 2021 (Wednesday)

# Project Proposal (Appendix C)

- Needs of school/students
- Schools' commitment to the project (e.g. timetabling, staff involvement, curriculum adaptation)
- Previous experience in implementing project learning/cross-curricular learning

Appendix C  
Page 2 of 2

Please provide the following details for each project separately.

## Part III: Proposal Details

Please discuss the project that you are applying for with the relevant Section of CDI, and submit a proposal with the following details on A4 sheet(s):

- Title of "Seed" Project with project code
- School particulars (e.g., reasons for conducting the project, commitment of teachers, willingness to share findings with other schools, previous experiences in school-based curriculum projects)
- Proposal details (e.g., objectives, how the project fits in with the curriculum needs of your school, availability of resources, action plan with schedule, expected deliverables and evaluation methods)

## Part IV: Secondment of Teachers (Please complete this part for "Seed" Projects provided with Seconded Teachers.)

Please tick in the appropriate box below:

- ☐ My school does not wish to nominate any teacher for secondment to the CDI to participate in its "Seed" Project(s).
- ☐ My school wishes to nominate the following teacher(s) for secondment to the CDI to participate in its "Seed" Project(s) (please also submit the completed *Appendix B and its Annexes 2 and 3* for each teacher nominated):

No.	Name of Teacher	Project code (secondment applied for)
1.	*Mr/Ms	
2.	*Mr/Ms	

\* Please delete where inapplicable.

# Project Co-ordinators

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Development Institute

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