

Monitoring Mechanisms for Lifelong Learning in Singapore: Why, How, and What's More?

Presentation at the Fourth International Conference on Learning Cities

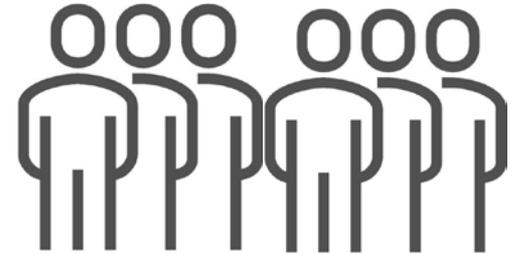
PROFESSOR LEE WING ON, Executive Director, Institute for Adult Learning Singapore
Medellín, Columbia, 1 October 2019

SINGAPORE AS A LEARNING CITY

The expanded goals of SkillsFuture and lifelong learning in Singapore, with inclusion as a planning principle

Skillsfuture is a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points.¹

Inclusion as a planning principle is embedded in the goals of lifelong learning in SkillsFuture:



Provide **learning opportunities for everyone**

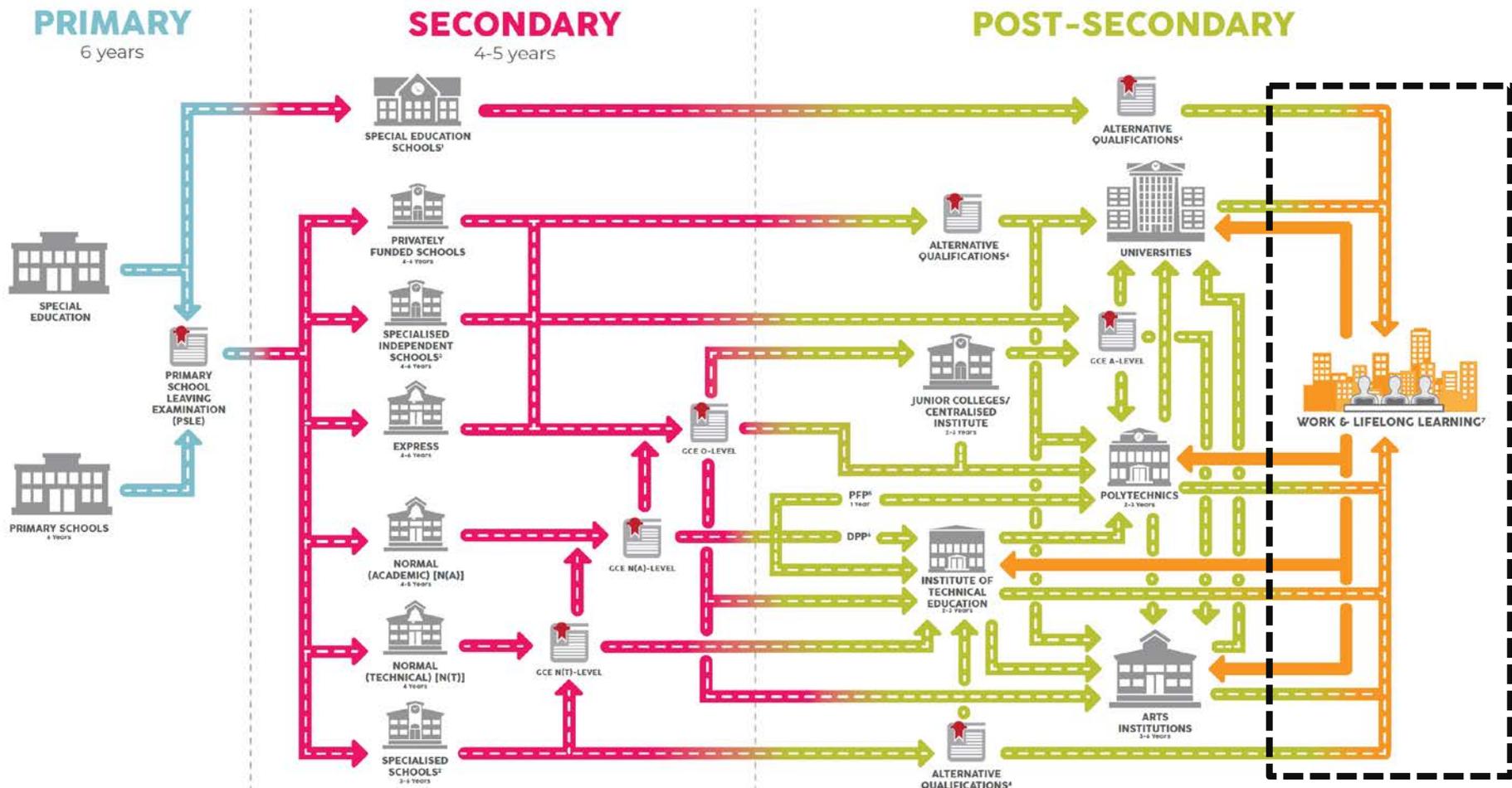
Provide **funding support to equalise participation opportunities**

Facilitate **individual learning decision making**

SINGAPORE AS A LEARNING CITY

Flexible and diverse education pathways,
with emphasis on skills over qualifications

Multiple Parallel Education Pathways in Singapore's Education System²



² Source: Ministry of Education Singapore. Extracted from: <https://www.moe.gov.sg/education/education-system>

SINGAPORE AS A LEARNING CITY

Flexible and diverse education pathways,
with emphasis on skills over qualifications

SkillsFuture Earn and Learn Programme (ELP)

Work-learn programme for fresh graduates from polytechnics and the Institute of Technical Education (ITE)

40 FEATURE ARTICLE

FEATURE ARTICLE

EVALUATION OF THE SKILLSFUTURE EARN AND LEARN PROGRAMME (ELP)

Study found **positive wage returns** for polytechnic graduates who enrolled in ELP

INTRODUCTION

Source: Ong, S. J., Suhaiemi, A. (2019). Economic Survey of Singapore Second Quarter 2019 40-48.
Singapore: Ministry of Trade and Industry Singapore.

SINGAPORE AS A LEARNING CITY

Flexible and diverse education pathways,
with emphasis on skills over qualifications

The Skills Framework³

Document with key information on sector, career pathways, occupations, skills required, to facilitate career navigation

SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP - DATA ANALYST			
Sector	Infocomm Technology		
Track	Data		
Occupation	Data Scientist		
Job Role	Data Analyst		
Job Role Description	<p>The Data Analyst blends historical data from available industry reports, public information, field reports or purchased sources and performs analysis to support business and product decisions. He/She uses development tools to generate reports, dashboards and analytical solutions according to business rules and specifications. He leads important projects and coordinates with internal teams to develop projection on the outcome of implementing certain business strategies that result in actionable insights.</p> <p>He enjoys working with data and displays willingness to learn. He adopts an analytical approach to solving problems and displays confidence when communicating ideas.</p>		
	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)
	Identify business needs	Work with stakeholders to define business and information needs	
		Support the translation of business needs into analytics and reporting requirements	
		Recommend types of data and data sources needed	

SINGAPORE AS A LEARNING CITY

Coordination and partnerships across every level of society to drive lifelong and life-wide participation in learning



Government-wide Coordination & Participation

Cross-ministry and cross-agency planning, with SkillsFuture Singapore driving and coordinating the implementation of the national SkillsFuture movement



Individuals

Take ownership and responsibility to chart own learning and prepare themselves for their next careers

Lifelong Learning Council

Consists of private and public sector leaders who work together to drive ground-up efforts to promote lifelong and life-wide learning and facilitate multi-stakeholder partnerships

Businesses

Institutes of Higher Learning

Grassroots

Unions

Civil Society

Community and social learning for all ages

SkillsFuture Festival

6-week event to promote lifelong learning, with range of learning activities held across different business and community spaces



Multi-agency partnership and participation, to integrate learning into aspects of the urban space and urban life

People's Association

Organises **community learning** activities through its grassroots network



National Library Board

Promotes **reading, learning and information literacy**



Council for Third Age

Promotes **active ageing** amongst seniors with focus on lifelong learning



Driving capabilities in the Training and Adult Education (TAE) sector to ensure delivery of quality programmes to learners

Skills Framework for the TAE sector

- Dedicated Skills Framework for the TAE sector to guide manpower strategies in building capabilities of training providers and adult educators to deliver quality training

IAL as a lead institute in Singapore to drive professional development of adult educators and training providers



Provide **credentialing and professional development programmes for adult educators**

Conduct **research to deepen knowledge** of both policy and practice, e.g.:

- Study on training providers and adult educators
- Learning pedagogy related research

Monitoring mechanisms are crucial to feedback into policy and practice

Having the right information is crucial to aid decision making, whether they relate to strategies and policies, allocation of resources and financing arrangements, or personal and career.



Identify **gaps in provisions of learning opportunities** among various segments of the population to provide more targeted support

Perform **comparative studies with other cities** to identify best practices and gaps that can feedback to strengthen local practices

Evaluate **effectiveness and quality of learning and training initiatives** to ensure that they meet standards and learning needs

- Skills and Learning Study
- Survey on the Perceptions of Lifelong Learning

- Survey of Adult Skills (PIAAC)

- Training Quality and Outcomes Measurement
- Training and Adult Education Landscape Study

Some Efforts to Date

INTERNATIONAL BENCHMARKING STUDY: SURVEY OF ADULT SKILLS (PIAAC)

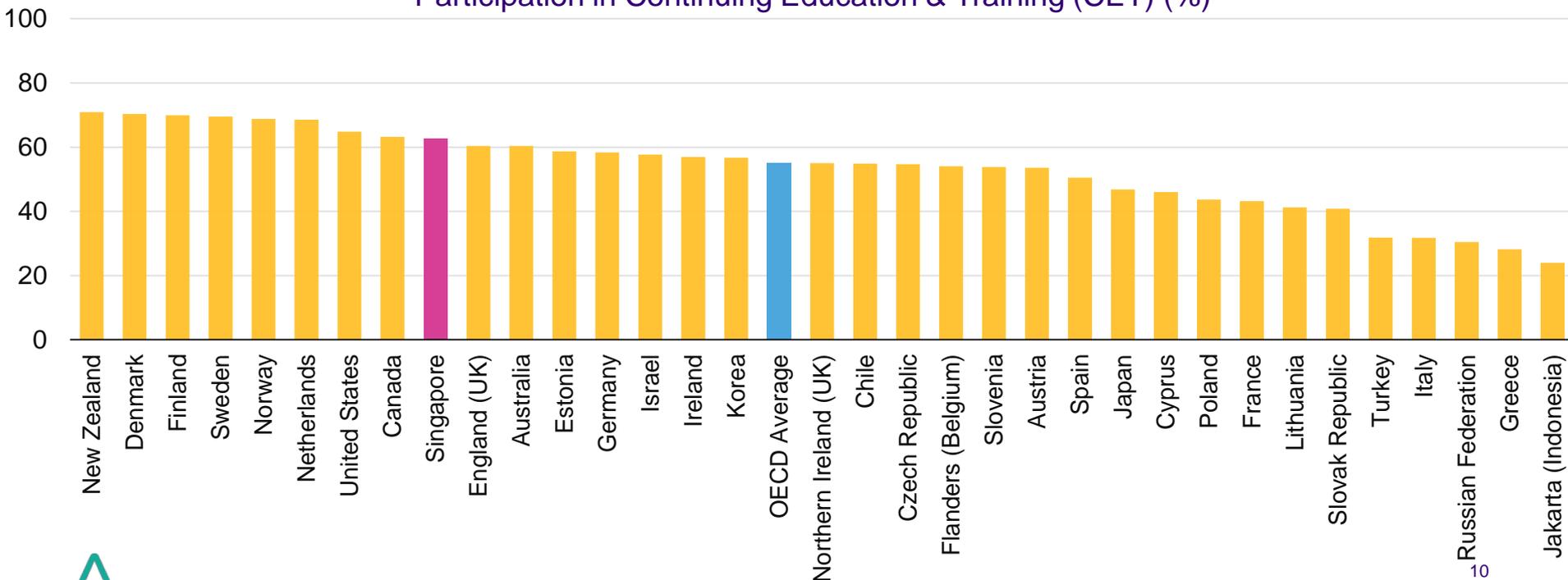
Comparative analysis and international benchmarking to gain insights on education and learning systems

Survey of Adult Skills (PIAAC)

- International survey led by OECD, and conducted in over 40 countries
- Skills, competencies, and different modes of learning

How does Singapore Fare in CET participation?

Participation in Continuing Education & Training (CET) (%)



LONGITUDINAL STUDY: THE SKILLS AND LEARNING STUDY

Tracking long-term changes in lifelong learning culture among adults in Singapore



Framework: The Six Pillars of Lifelong Learning

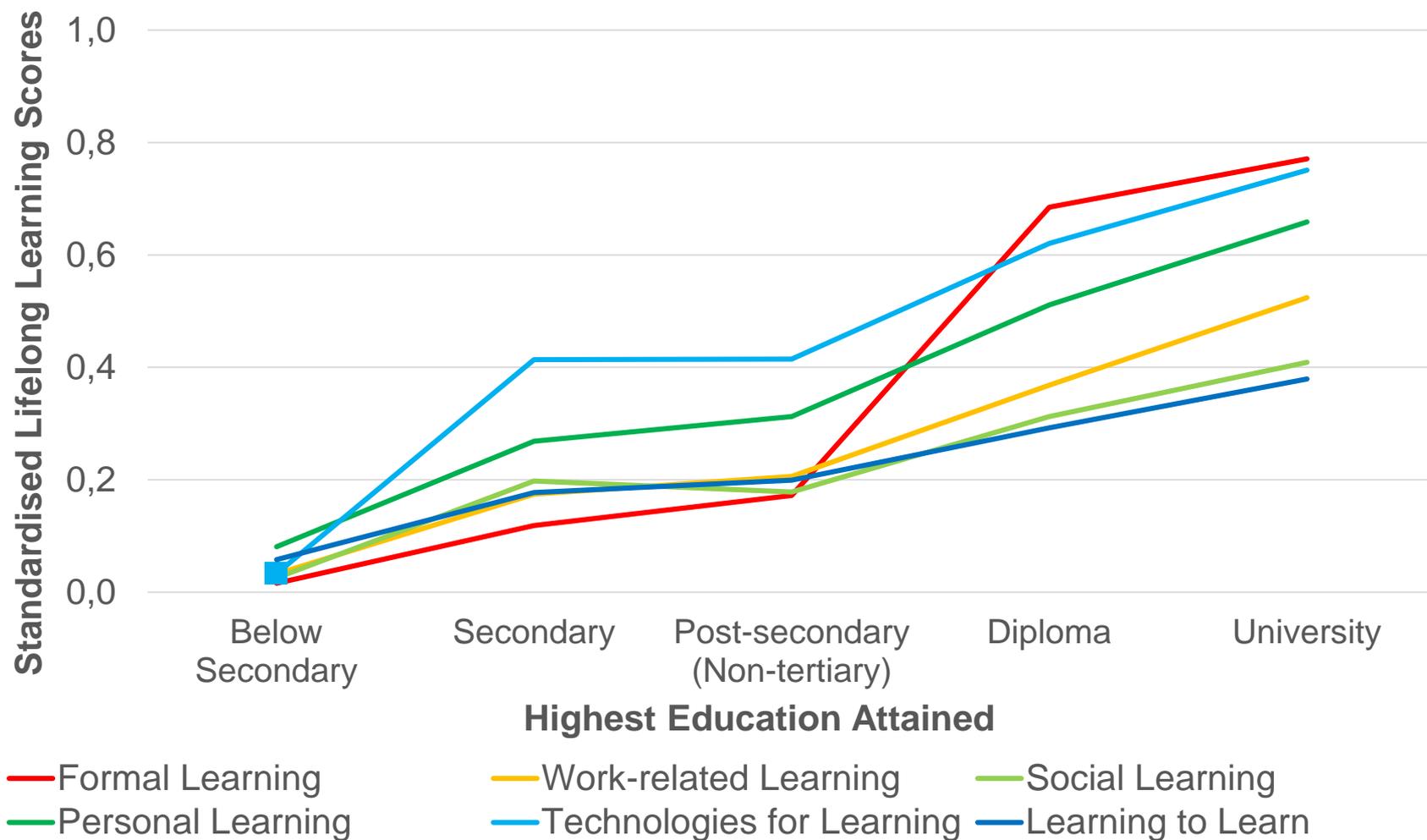
Pillar	Description
1 Formal Learning (Learning to know)	Refers to formal education linked to qualifications, and is often pursued in the first cycle of education
2 Work-related Learning (Learning to do)	Refers to learning for vocational and professional needs
3 Social Learning (Learning to live together)	Refers to the learning that provides a strong basis for community development linking individual competence and resilience to societal issues such as inequality, charitable activities and social inclusion
4 Personal Learning (Learning to be)	Links learning to personal growth that is not necessarily defined by economic gains, but areas like personal development and fulfilment
5 Technologies for Learning (new)	Relates to the individual's ability to use, adapt and benefit from rapidly changing technologies and new learning media
6 Learning to Learn (new)	Encompasses the internal dispositions required by individuals to successfully pursue lifelong learning (learning strategies)

The Skills and Learning Study

- Survey conducted by IAL every three years, on a nationally representative sample of adult residents in Singapore
- Participation and motivation of learning in different aspects of life

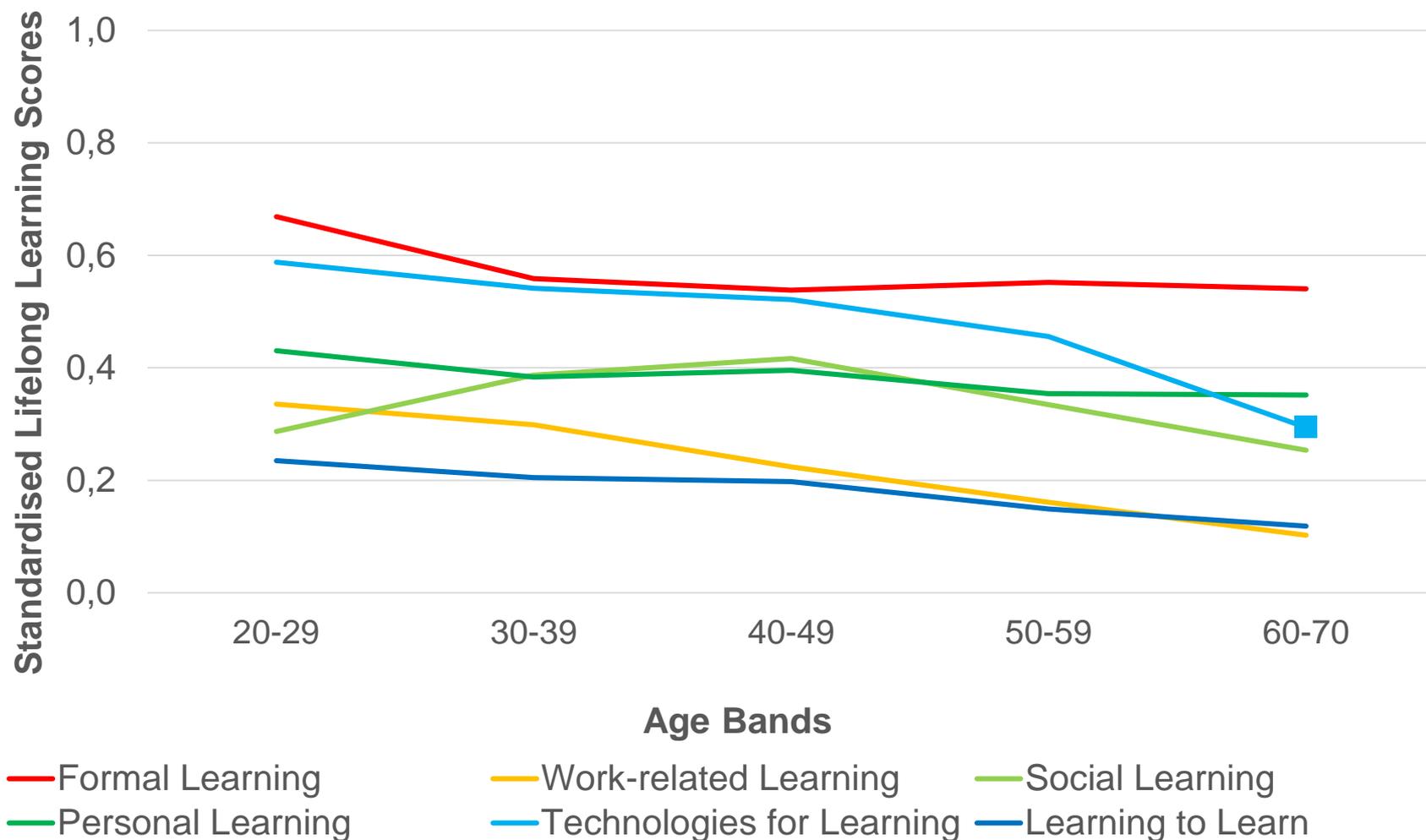


Learning is positively associated with education attainment



The learning scores presented are based on the standardised regression coefficient. Rather than the value of the score, we wish to draw attention to the size of the differences in education levels between the six pillars.

Learning is negatively associated with age

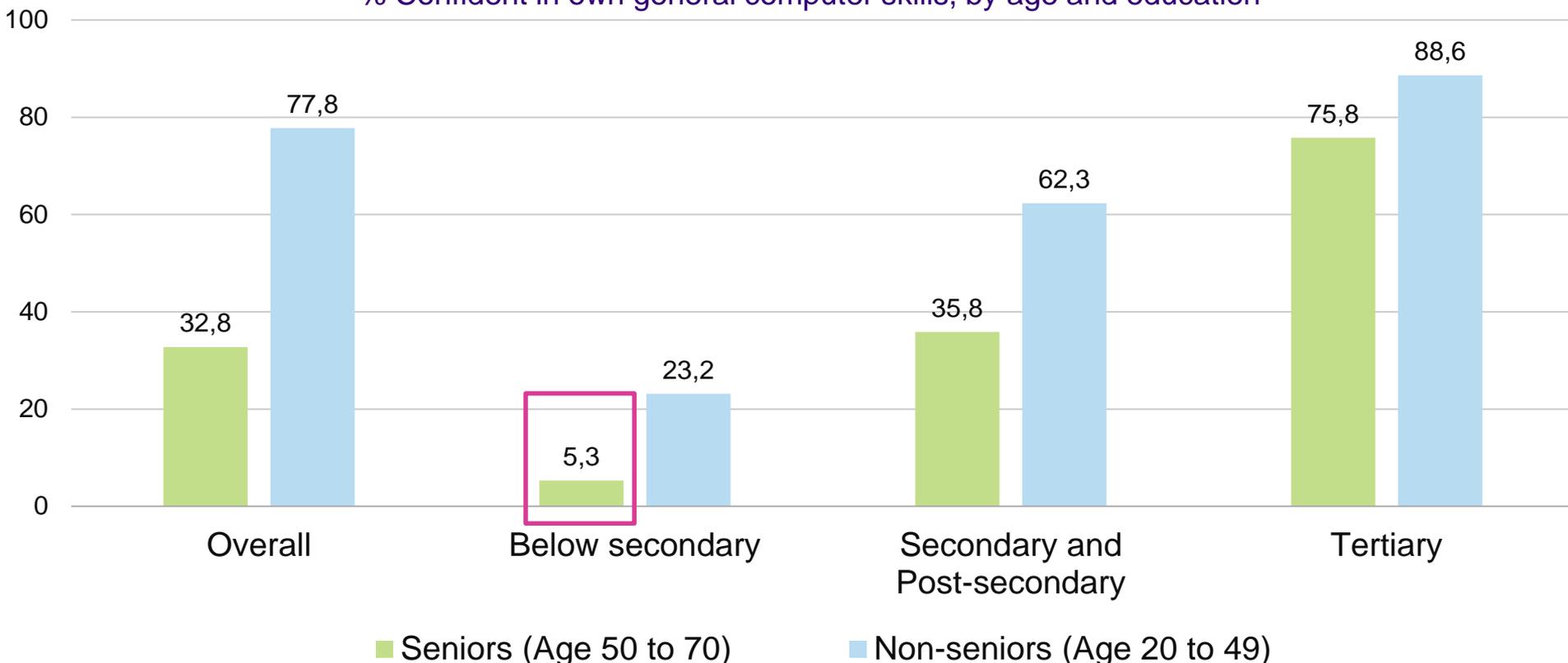


The learning scores presented are based on the standardised regression coefficient. Rather than the value of the score, we wish to draw attention to the size of the differences in age bands between the six pillars.

Seniors with low education attainment report low confidence in own ICT skills

Only 1 in 20 seniors with below secondary education are confident in their general computer skills. But, are they participating in related learning?

% Confident in own general computer skills, by age and education

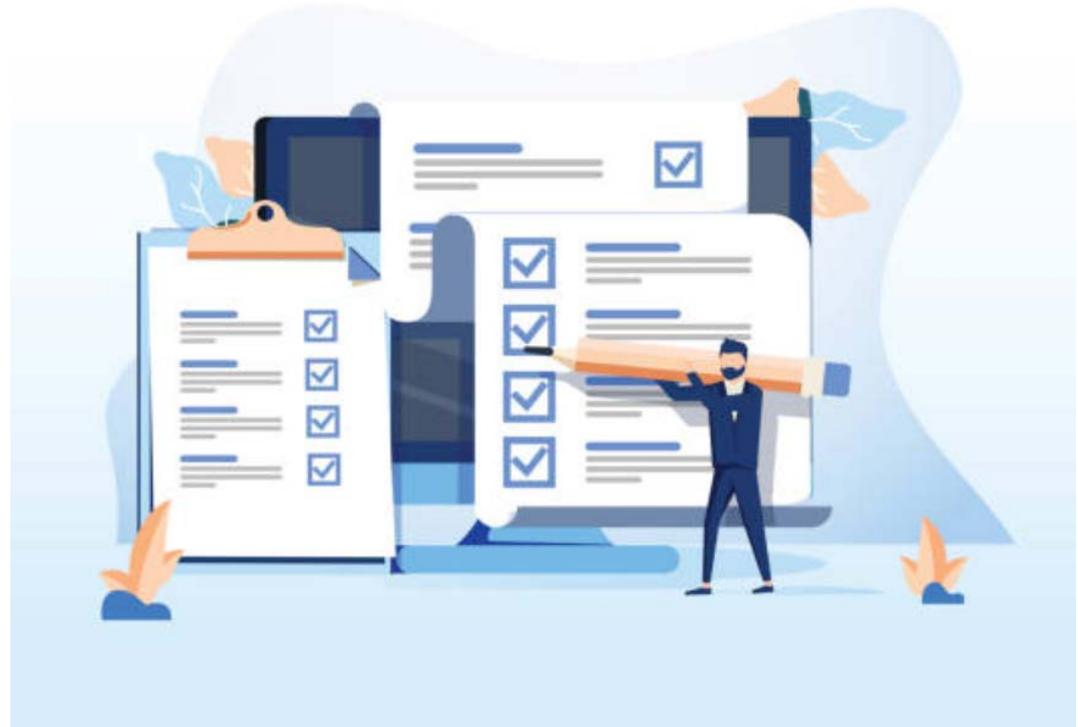


SHORT-CYCLE STUDY: SURVEY ON THE PERCEPTION OF LIFELONG LEARNING

Collecting regular feedback on awareness, attitudes, and participation in lifelong learning

Survey on the Perception of Lifelong Learning

- Survey conducted by the Lifelong Learning Institute annually
- Identify which segment of the population to focus immediate efforts on promoting awareness of lifelong learning



TRAINING QUALITY AND OUTCOMES MEASUREMENT

Monitoring the quality of training providers and programmes to ensure that they meet standards

Audit and Quality Assurance of Training Providers and Programmes

- Systems to collect targeted and immediate learners' feedback after completion of training programmes



Why is this important?

Help learners **make more informed decisions** and training providers **improve their course offerings**, through publication of quality and outcomes ratings on the MySkillsFuture Training Exchange online portal

Ensure government **funding** for training programmes are **optimally allocated and utilised**

LOOKING AHEAD:

Taskforce on the Future of Adult Learning Research Agenda – Symposium in Nov 2019

Towards an Interdisciplinary Understanding of Lifelong Learning Policy, Practice, and Research

New Opportunities & Challenges

What is the **future of human capabilities**, over and above the immense potential of Artificial Intelligence and Machine Learning?

What implications does it have on our understanding of lifelong learning and its role in society?

What is our vision of the Future of Adult Learning?

Urban Studies

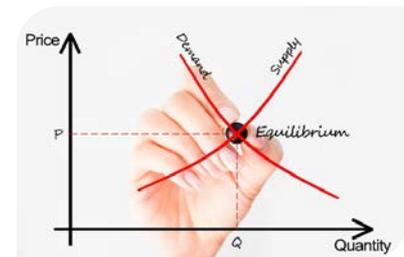


Gerontology



Beyond Traditional Perspectives

Economics



Artificial Intelligence



Neuroscience





Thank You

<https://ial.edu.sg>