



## Are Smart Cities Learning?

- Professor Michael Osborne
- Director, [Pascal Observatory](#)
- University of Glasgow, UK
- michael.osborne@glasgow.ac.uk



# The Learning City

Effectively mobilises its resources in every sector to promote inclusive learning, re-vitalise learning in families and communities, and facilitate learning for and in the workplace.



1 to 3 October 2019

**International  
Conference on  
Learning Cities**

**Medellín 2019**

**Education**  
**2030** | 

UNESCO Background Paper -  
Sustainable Learning Cities: Inclusion,  
Equity and Lifelong Learning

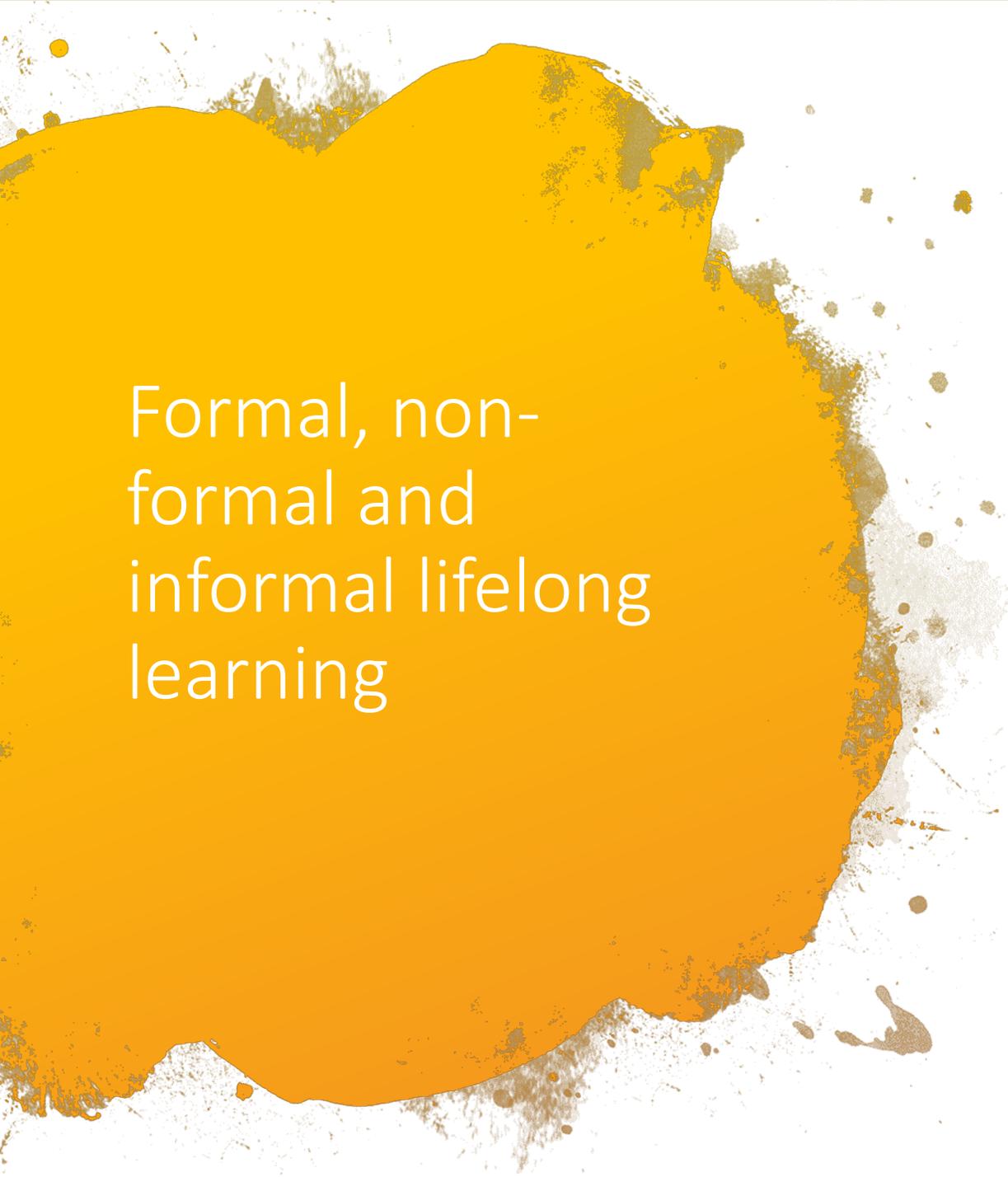


# Key concepts

- Learning Society
- Formal, non-formal and informal lifelong learning
- Indigenous Knowledge
- Equity
- Collectivism v Individualism
- Regulatory and Policy frameworks
- Structural and functional diversity of learning systems
- Institutional Flexibility
- Intersectoral Co-operation
- The Quadruple Helix
- Knowledge Co-construction

# Learning Society

- education was not a segregated activity, conducted for certain hours, in certain places, at a certain time of life. It was the aim of the society. The city educated the man. The Athenian was educated by culture, by *paideia*. (Hutchins 1970, p. 133)



## Formal, non- formal and informal lifelong learning

- Lifewide learning
- *enriches the picture by drawing attention to the spread of learning, which can take place across the full range of our lives at any one stage in our lives. The 'lifewide' dimension brings the complementarity of formal, non-formal and informal learning into sharper focus. It reminds us that useful and enjoyable learning can and does take place in the family, in leisure time, in community life and in daily worklife. (European Commission 2000, p. 8)*



# Indigenous Knowledge

Knowledge particular to specific cultures  
and societies

City of Victoria, Canada

- Reconciliation work with the Songhees and Esquimalt Nations on whose territory the city is built (see <http://www.victoria.ca/reconciliation>).
- Indigenous-led and indigenous-informed process, asking the city to re-think the very ways in which it governs



# Equity

- Systems of education and institutions of learning should be fair in relation to access, provide appropriate support upon entry and create pathways to equitable outcomes of the learning that is provided. Fair and equitable systems should reflect the nature of the population served.
- However, equity is linked to a normative framework of fairness, which may differ across countries and cultures
- Gender, Race and Ethnicity, Age, Disability, Migrant/refugee status, Socio-economic class/status, Caste, Location

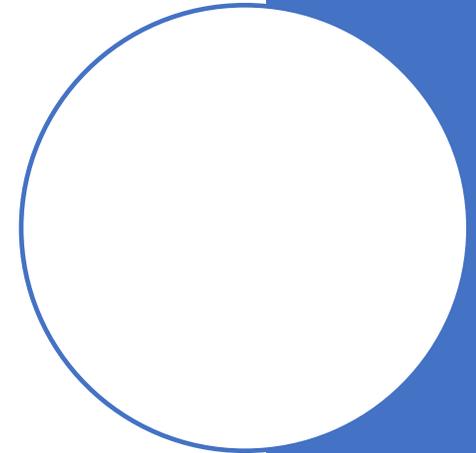


# Collectivism

- lifelong learning ... 'producing a skilled and competent workforce, but rather to strengthen cooperation, coordination and collaboration among the members of a community. It emphasises **collectivism** over individualism' (EC 2000)
- community learning centres in Bangladesh, Indonesia, Mongolia, the Republic of Korea, Thailand and Vietnam provide many examples of local, often citizen-led and NGO-convened, **collective actions** (NILE/UIIL, 2017)
- '**ubuntu**' and similar concepts which reflect a particular form of 'humanness' distinguish African perspectives, which among others have been inspired by Mahatma Gandhi and Julius Nyerere (Preece 2011)
- Many Asian learning city initiatives are based upon a **community relations model** (Makino 2013)

# Individualism

- the '**self optimizing entrepreneurial self**, found in lifelong learning discourses', and as a result, policies have been without the power to adequately deliver social inclusion or social cohesion. (Morgan-Klein and Osborne 2007)
- Japan - following the economic collapse at the end of the 1980s, lifelong learning shifted its focus from being about community building to an individualised model of the **self-organising individual**. (Han and Makino 2013)



# Regulatory and Policy frameworks



Legislation



Regulation



Policy



Governance



Funding

# A National Framework

- Only 41 countries around the world with policy frameworks or strategies for LLL
- Some of these are within all-encompassing educational policies with only a passing reference to lifelong learning.
- Less frequent to find countries that have an overarching national lifelong learning policy and even more so legislation for lifelong learning
- The Republic of Korea stands out
  - National Lifelong Education Act
  - NILE
  - Translation into local city actions
  - Cascading into smaller levels of geography

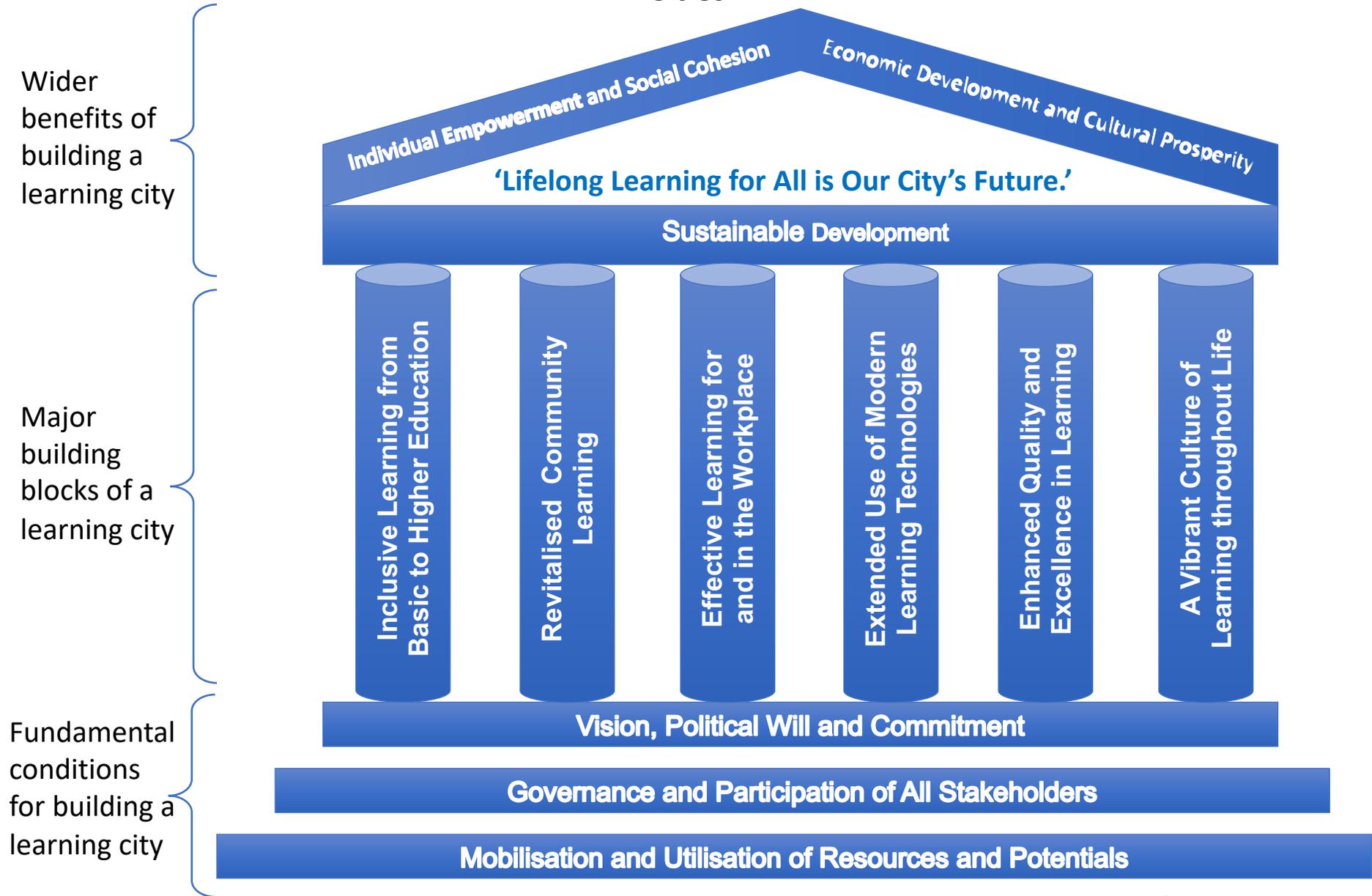




# Structural and Functional Diversity

- Organisational options that exist to deliver policy.
- The structures that exist, and the extent to which these can respond to the challenges of delivering provision that meets needs and demands.
- A system may be structurally diverse in that it contains a range of institutions, but may be functionally narrow in what these do.

# A Preliminary Framework of the UNESCO's Key Features of Learning Cities



# Institutional Flexibility



location (e.g. within formal institutions, workplaces, communities, virtual using digital means)



**mode** (full-time, part-time, blended)



**means of accreditation**



the extent to which learners as active **co-constructors** of learning programmes based on their own **demands** and self-identified **needs**



# Intersectoral Co-operation

- *'mobilisation of all 'players' involved in ascertaining learning needs, opening up learning opportunities for people of all ages, ensuring the quality of education and training provision, and making sure that people are given credit for their knowledge, skills and competences, wherever and however these may have been acquired'. (European Commission 2002)*
- City of Pécs, Hungary
  - county and city authorities, along with its two universities, have work together through a Regional Forum to create a joint action plan
  - Pécs Learning City-Region Forum



# Digital Opportunities

- ‘technology holds enormous promise to help foster 21<sup>st</sup> century skills, including social and emotional skills. It can personalize learning, engage the disengaged, complement what happens in the classroom, extend education outside the classroom and provide access to learning to students who otherwise might not have sufficient educational opportunities’. World Economic Forum (2016)



# Top-Down Smart Urbanism

---

- incorporating technical interventions in a city's core systems
  - transport, business, energy, housing, education, environment or communication
- facilitate optimal resource management and sustainable growth
- Economic competitiveness, Branding
- Corporate focus
- Tensions between private and public sectors



# Bottom-up New Urbanism

- Citizens involved in developing, promoting and utilising smart solutions
- the concept of a Smart City goes way beyond the transactional relationships between citizen and service provider. It is essentially enabling and encouraging the citizen to become a more active and participative member of the community, for example, providing feedback on the quality of services or the state of roads and the built environment, adopting a more sustainable and healthy lifestyle, volunteering for social activities or supporting minority groups (BIS 2013, p. 7).



# Implications for Learning Cities

---

- Not a learning structure that is a supply-led system offering to “educate” a population,
- Promotion of mutual exchange in the spirit of co-construction of knowledge and expertise
- Learning experienced not only by citizens, but also by expert proponents and their organisations.

# The Quadruple Helix and Knowledge Co-creation

HE, innovative companies, knowledge institutions and the public

Collectively shape the development of the city

Big Data, Citizen Scientists - see Urban Big Data Centre

From Smart City 2.0 to Smart City 3.0 (e.g. Amsterdam)

From development **led** by city rather than providers of technology to a phase where citizen co-creation that is **enabled** by the city **and** technology



# Amsterdam Smart City

Join

[Updates](#)

[Requests](#)

[Events](#)

[Projects](#)

[Themes](#)

[Visits](#)

[Network](#)

Join our open collective,  
increase your impact  
and start building  
the city of tomorrow

[Sign in](#)

[About us](#)



# The Amsterdam Model

---

- Brings together citizens, innovative companies, knowledge institutions and the public (the QH)
- Open community that anyone can join
- Data that is usually only accessed by the private sector is available to citizens to use – grassroots innovation
- *StartupAmsterdam*, creates citizen-inspired challenges for start-up companies to solve using city data

# Are Smart Cities Smart?

---



153 cities around the world, both large and small, have published an official Smart City strategy



15 of these have plans that demonstrate a comprehensive strategic approach.



8 of the 15 are at an advanced stage of implementation.



cities tend to take a selective approach to their strategies, for example focusing on fields such as government or mobility at the expense of education and health



<https://www.rolandberger.com/en/Publications/Smart-City-Strategy-Index-Vienna-and-London-leading-in-worldwide-ranking.html>

# Are Learning Cities Smart?



- Learning city models recognise the importance role of the fourth helix – civil society
- And joined up planning – see <http://pobs.cc/16nra>
- Some good examples of engagement from cities with UNESCO Learning City Awards – Bristol, Larissa and Espoo – especially with older adults
- Most initiatives tends to be remedial – access/literacy



# More information

- <http://cradall.org>
- <http://pascalobservatory.org>
- <http://pie.pascalobservatory.org>
- <http://lcn.pascalobservatory.org>
- <http://pure.pascalobservatory.org>
- <http://ubdc.ac.uk> – Big Data
  - [Thakuria, P. \(V.\), Sila-Nowicka, K. , Hong, J. , Boididou, C., Osborne, M. , Lido, C. and McHugh, A.\(2020\) Integrated Multimedia City Data \(iMCD\): a composite survey and sensing approach to understanding urban living and mobility. \*Computers, Environment and Urban Systems\*.  
<https://doi.org/10.1016/j.compenvurbsys.2019.101427>](#)
- <http://www.centreforsustainablecities.ac.uk>
- <http://sueuaa.org>
- <http://learningcities.uil.unesco.org/home>
- Osborne, M. and Hernandez, S. (2019) *Sustainable Learning Cities: Inclusion, Equity and Lifelong Learning*. Hamburg: UIL (Briefing paper for 4<sup>th</sup> Learning Cities conference, Medellin)