

Learning Cities and Sustainable Capital Growth

An alternative vision of capital

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This article proposes a fresh look at the meaning of capital as it relates to learning cities and regions. Although capital is traditionally related to the economic dimension of development, the article suggests that many more subtle linkages contribute to the triumvirate of economy, society and the environment, the three major domains from which most city activity flows. It further adds a number of other capitals that are interwoven into the fabric of a city's, and a region's, ecology.

3 Major Capital Dimensions

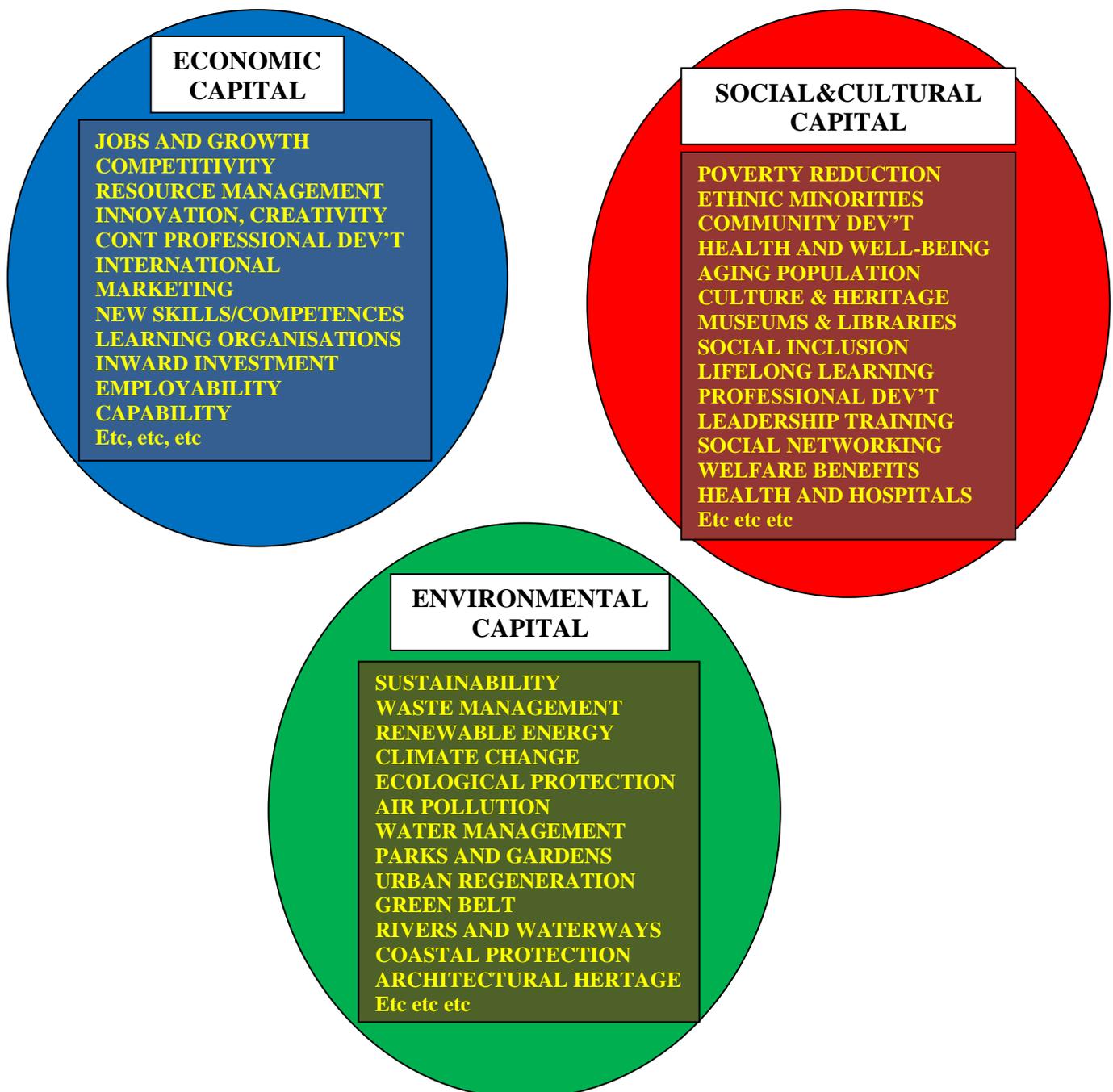


Figure 1: Activities within the three major Capital Dimensions of a city

In general city activities are encapsulated within three major focuses (Longworth, 2012)

- the **Economic**, in which the city's future is tied to continuous growth, and/or change, in order to create wealth and provide a constant supply of employment opportunities for citizens. In so doing it must encourage its business organisations to re-create themselves as learning organisations, establish links with those institutions that can help industry meet its needs and remain competitive, innovative and creative. It is also related to the way a city markets itself to the outside world, thereby attracting inward investment, which it has to justify through the effectiveness of its governance and the employability of its population.
- the **Environmental**, which requires growth, and the ecological services within the city, to meet local, national and international standards of sustainability. It also centres on the health and well-being of the city's people providing open spaces and facilities within which they can grow in safety and fulfilment. At the same time it cannot ignore the changes that take place in every area of local life, and must take steps not only conserve that which it is necessary to conserve, but also to meet the new challenges that environmental degradation throws up locally and around the world. That means that the modern city addresses planetary, as well as local, concerns in the interests of developing a clean environment, managing climate change and protecting ecological diversity.
- and the **Social and Cultural**, which deals with the physical and mental development and welfare of people and organisations, the way they interact and the change issues that affect modern cities in constant transition. Not only does it cover the issues of implementing lifelong learning solutions in order to confront new educational paradigms in the modern city, but also addresses the social questions relating to diversity, immigration, poverty, welfare and disability, among many others. In the cultural sphere it concerns the local heritage as well as community tradition, including those of the new ethnic communities that add to a city's diversity.

Researchers debate whether cultural capital should be a separate domain. Van Beilen et al, referring to UNESCO documents, came to the conclusion that culture actually pervades all of the domains. Such classification theories become less relevant when figure 2 below is taken into account, and this will be discussed in the next section. However they are separated, all of the topics shown in figure 1, and more, are the traditional concerns of developed world cities for which policies and strategies, some of them more effective than others, exist. Many of them are the normal business of every city, learning or not. Many are issues that impinge greatly on the city's social, cultural, economic and environmental future, and it is from these that a city can develop capital growth that will help the city meet the future with confidence. But of course, in many cities, some topics are the object of greater focus than others. Particularly in times of austerity, those in the blue circle tend to take precedence.

The Real Situation

But of course the holistic view of city development gainsays such simplistic models. Many issues transcend the boundaries of the separated paradigm. Figure 2 below shows how outdated views of growth and development have been superseded by the need for, for example, sustainability, and how the three domains are inextricably interconnected, intertwined and interactive. Economic growth, for example cannot happen without a sophisticated view of how diversity, educational reform, creativity and technology, among other parameters, work together to produce it.

Jobs and Growth, while ostensibly an economic requirement, take on an environmental mantle with the requirement for them to be sustainable or related to green development, and a social one when they are linked to the need for a skilled and well-educated population using the technology of the day. Thus the creation of a city's training and economic development strategy will include experts from all three areas, and the learning requirement for technologists, managers, accountants, business leaders, social scientists and, above all, politicians who will take the final decision, might better favour a broad knowledge of all the parameters involved rather than narrow specialist expertise.

Similarly the maximisation of resources is economic when applied to industrial policy, environmental for energy and urban development and predominantly social when intellectual, human, cultural and community capital is being mobilised. Every activity shown in Figure 2 is cross-domain and the awareness of these inter-relationships, and the development of innovative strategies to deal with them, is one of the many indicators of a learning city.

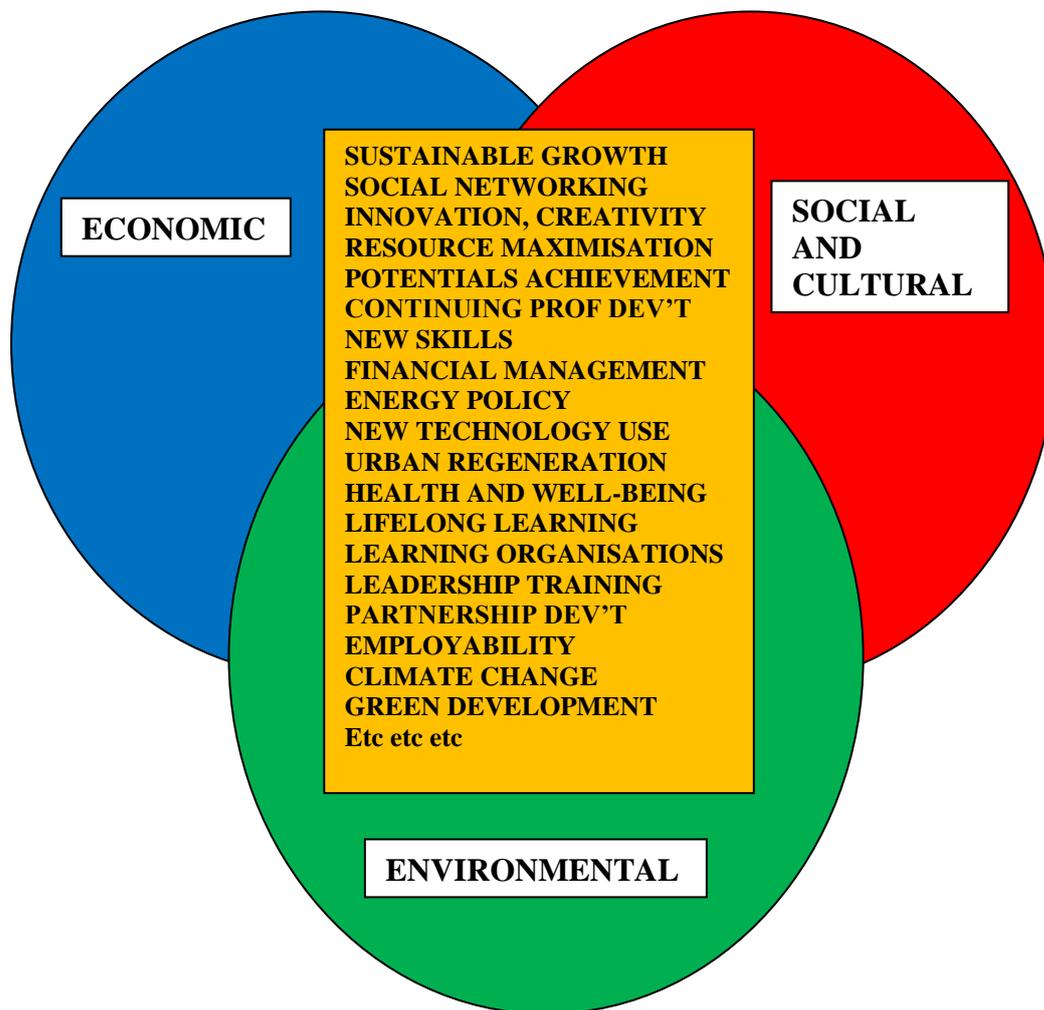


Figure 2 :Issues crossing more than one of the Capitals

In particular, what stands out among the many urgent issues for city leaders is the need for learning, lifelong, to be prioritised, not for its own sake but for three critical reasons : (Belanger 1997)

1. The changing nature of work : Jobs, growth, innovation, new technologies, employability, all demand higher and wider skill levels than in the past. European Commission statistics chart the rapid demise of low-skill occupations and a greater requirement for professional, management and technical skills in order to meet the demands of the future.

2. The greater complexity of urban living. Dynamic change creates tensions and conflict in societies where people find it difficult to adjust to new ways of doing things and/or to understand the rationale for new laws and alliances. There are many examples, from new technologies to fishing bans to the need for international cooperation. Recent documents suggest that some 20% of the jobs of ten years hence do not yet exist, which makes social and economic planning difficult.

3. Greater involvement of communities and people in decision-making. Active citizenship, more consultation and measures to give more power to the people demand responsible critical judgment on the part of those whose opinion is being sought and acted upon. The parallel is with learning organisations where decisions are made at the most appropriate point in the production cycle by those closest to the action. In an industrial organisation it is vital that the decisions are correct and made on the best available data. It will need to be so in cities, communities and civil society.

The desirable skills, competences, proficiencies, attitudes and values for 21st century life and work (capabilities and functionings in Sen's terminology) have long been discussed, but figure 3 below suggests a number of the most vital for personal and capital development (Longworth, 2003)

Self-management skills	<ul style="list-style-type: none"> ❖ ❖ Being determined to fulfil personal potential ❖ Continuously developing personal skills and confidence ❖ Setting and achieving realistic personal targets ❖ Purposeful introspection ❖ Maintaining perspective and a sense of humour
Handling and interpreting information	<ul style="list-style-type: none"> ❖ ❑ Using information technology tools and techniques ❑ Collecting, storing, analysing and combining information ❑ Recognising patterns and links
Applying new knowledge into practice	<ul style="list-style-type: none"> ❖ ● Seeing the connection between theory and practice, ● Transforming knowledge into action ● Continually wanting to improve processes, procedures and situations
Learning to learn	<ul style="list-style-type: none"> ❖ ➤ Staying open to new knowledge and new learning techniques ➤ Identifying and using sources of knowledge ➤ Relating learning to personal objectives
Questioning, reasoning and critical judgement	<ul style="list-style-type: none"> ❖ ✓ Knowing the difference between good, bad and indifferent ✓ Carefully researching options and outcomes before making decisions ✓ Never being satisfied with the status quo ✓ Sorting out the substance from the verbiage
Management and Communication skills	<ul style="list-style-type: none"> ❖ ▪ Expressing oneself clearly orally and verbally in formal and informal situations ▪ Persuading others ▪ Listening to others ▪ Helping others to help themselves
Thinking skills and Creativity	<ul style="list-style-type: none"> ❖ ● Using Creativity and Imagination to solve problems ● Thinking 'out of the box' ● Anticipating situations and developing forward vision
Adaptability, flexibility and versatility	<ul style="list-style-type: none"> ❖ ✓ Facing change with confidence ✓ Adapting to new situations and tasks ✓ Being ready to change personal direction
Team work	<ul style="list-style-type: none"> ❖ ➤ Sharing information and knowledge, ➤ Receiving information and knowledge ➤ Participating in goal-setting ➤ Achieving common goals
Lifelong Learning	<ul style="list-style-type: none"> ❖ ▪ Continuously upgrading personal skills, knowledge and competences ▪ Cherishing the habit of learning ▪ Contributing to the learning of others

Figure 3: 21st Century life and work proficiencies, attitudes and values

It will be noted that very few of these essential personal tools are being taught in today's schools, universities and other educational establishments. And yet they are indispensable for a city's, a region's, a country's capital growth.

Capital as assets as potential as resource

In the lexicon of economics, capital has a very specific meaning, usually related to wealth creation, the workplace and the labour market. Academics and writers will often contest the different meanings and their scope but the particularity survives. However, for learning cities there is a strong argument for expanding the definitions, so that they correlate, in a complex iterative system, with the wider functions and modus operandi which the city must embrace. For example intellectual capital is defined somewhat narrowly in the business dictionary as follows: *Collective knowledge (whether or not documented) of the individuals in an organization or society. This knowledge can be used to produce wealth, multiply output of physical assets, gain competitive advantage, and/or to enhance value of other types of capital. Intellectual capital is now beginning to be classified as a true capital cost because (1) investment in (and replacement of) people tantamounts to investment in machines and plants, and (2) expenses incurred in education and training (to maintain the shelf life of intellectual assets) are equivalent to depreciation costs of physical assets. Intellectual capital includes customer capital, human capital, intellectual property, and structural capital. (Business Dictionary)*

Such a definition is reasonable enough when applied to economic and labour market interests, and it already includes the idea of a potential to produce wealth and gain competitive advantage. Within the context of a whole city development, however, it is inadequate, especially when it includes elements of human capital. The requirements of a city for social, cultural and environmental growth would interpret it more widely and include the potential and exploitable intellectual capital to be found for example in local communities. Here, the talents, skills, knowledge, experience and ideas of all people within the community, and the way they are used to increase the well-being and assets of the community as a whole, are investments in social wealth production. For budding learning cities such intellectual capital is the well-spring of growth. It has links to cultural capital, human capital, learning capital, family capital, community capital and ultimately to economic growth. Similarly the physical, intellectual and human assets of the city's institutional stakeholders in schools, universities, companies, community centres and public buildings can, by working both together and separately, increase the city's capital stock.

The transformative potential of these, and other, processes then becomes converted into new capitals, new resources and new assets, which in their turn become potentials for further transformations, and so on in a complex iterative system. The drivers and managers of such continuous capital development are not only the politicians, professionals, administrators and other city leaders but the people themselves and the city's institutions and organisations - the physical, human and intellectual capital that converts city potential into city growth. Much of this is fuelled by a pervasive lifelong learning culture that sees contribution as a renewal of a collective self-interested commitment and service to other people, and to the development of the city as a whole. Cities that can create such engines of sustainable growth, fuelled by the potential of lifelong learning will reap huge benefits. In the liberal economic democracies of the western world, where individualism and consensus is an embedded way of life, cities will have a harder task to generate sufficient momentum than will many Asian countries, where collective idealism and the willingness to work together is already leading to the development of vibrant lifelong learning cities.

Many Capitals

Taking the suggestion that capital is a continuously dynamic concept of resource renewal and potential development leads to the recognition that there are many capitals, each of them interconnecting with the others in the process of city growth. Figure 4 below depicts a number of capitals and sub-capitals in what might be called a complex interactive system. Each city will be

different in the size and influence of each capital, for example some cities have a greater ethnic diversity than others, while ports are oriented towards the influence of their seaboard location in their development strategies and ancient cities that have preserved their historical heritage will have yet a different focus on maximising this through tourism. Cities must therefore make an inventory of their geographical, historical, technological, diversity, cultural, human, intellectual and community strengths and potentials and invest in them for the future. By doing so, they will appreciate better the way in which the capitals are interlinked.

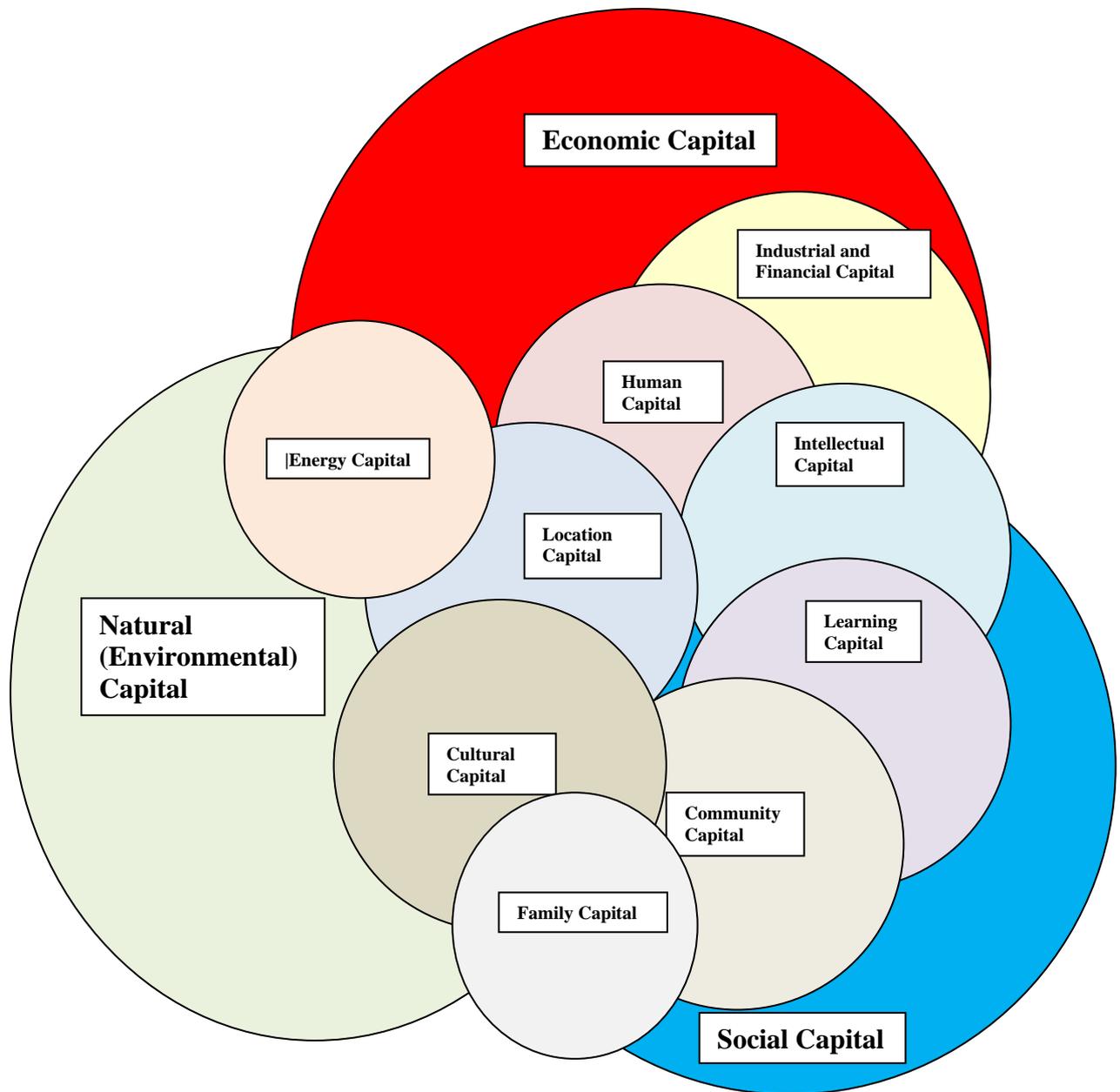


Figure 4 : Many interlocking capitals

There are also capitals within capitals (sub-capitals?). Family capital is an interesting case in point. The core family capital might be mother, father and children. Each of them makes a real or emotional contribution to the family capital in terms of incomes, outlooks, relationships, knowledge, achievements and aspirations. Not all are positive contributions. However, there is a potentially wider family capital stock which might incorporate grandmothers, grandfathers, uncles, aunts and cousins. They may bring advice (not always welcome), additional finance, new outlooks and assistance. For example, grandparents look after children while their parents are working, uncles who have travelled may bring stories of the wider world or provide role models, and cousins offer playmates and occasionally competition. Close friends supply another input to family capital, while the family members' experiences with the world outside of the family – children at school, parents at work -

increases its intellectual and learning capital. The family capital grows year on year, though some of it may be negative capital, for example through illness, death or criminality. Often this accumulated capital is made available to others through associations, volunteering activities, mentoring or participation in sports. This process too can be negative, for example membership of a far right hate organisation or criminal activities. It is, however, always inextricably bound within the structure of community capital and of cultural capital which, in their turn, are components of social capital, and this, as we have seen, also contributes to economic and environmental capital. Thus the sum total of family capitals within a city has a large effect on every aspect of city life.

Stakeholder Capital

The capitals shown in figure 4 are not exhaustive. There are many others contributing to the development of a learning city. One such is organisational capital, which might also be described as ‘stakeholder capital,’ being the resource potential of all the public and private organisations, singly and collectively, who have a stake in seeing a prosperous and stable future in the city. There can be little doubt that a well-run learning city confers benefits on its institutions as well as on its people. But in order to obtain those benefits these organisations will need to create contribution capital for its development. Figure 5 below shows the educational stakeholders of a city,

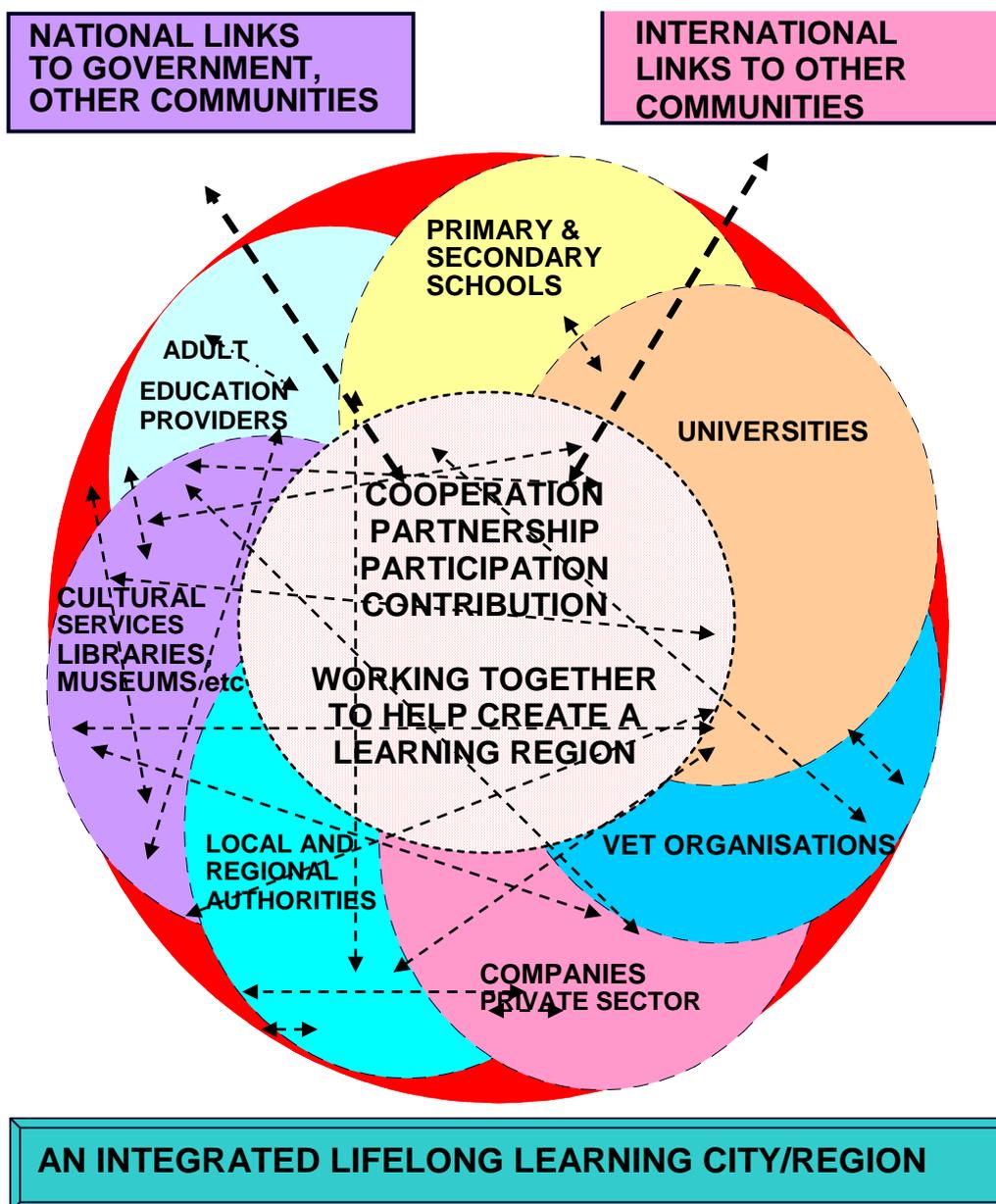


Figure 5 : Educational Stakeholders in a learning City

The extent to which schools, higher and further education, business and industry, community centres, the local authority etc become active stakeholders in learning city development is important because these are precisely the organisations which will benefit from the creation of a learning city, though, as has been said, those benefits will not accrue without effort on their part.

The ways in which they can convert their capital into potential and thereon into new resources are many and various, each stakeholder having the possibility of making an inventory of those contributions – from staff, students, managers and administrators alike. Schools are at the centre of their community – they have the opportunity both to take a leadership role and to use the community as a resource for their own benefit. Notions of schools-industry twinning, whereby employees make their talents and skills available to schools as mentors, providers or advisers, present an example of the latter. Equally, there are many potential roles and contributions of Business, Commerce and Industry in converting potential into new economic, social and environmental resources, and thereby increasing a Learning City's capital stock, as the list below shows. (Limerick Declaration, 2008)

- 1. Including Learning City development in its own corporate development strategy, for example by**
 - a) Recognising the benefits to the company and acting upon them
 - b) Contributing to the Learning Region development strategy
 - c) Linking aspects of its own development strategy to that of the learning region
 - d) Using the Learning Region as a marketing tool
 - e) Seconding people to learning region strategy development and delivery as part of management development programme
 - f) Making financial contribution in accordance with perceived benefit of learning region concept
 - g) Contributing to regional skills and competences development strategy future and present needs
 - h) Encouraging creativity and innovation as a regional development
 - i) Including Learning Region topics in its continuous improvement courses for management and professionals
 - j) Participating in Conferences, seminars and courses on regional development
 - k) Making its facilities available to organisations in the region
 - l) Encouraging International links between regions and using them for trade development
 - m) Making its Quality Management and Learning Organisation expertise available to regional institutions
 - n) Displaying Learning Region posters and making other literature available to employees
 - o) Keeping employees informed about learning region strategies and rationale
 - p) Encouraging suppliers and customers to participate in Learning Region development
 - q) Establishing robust links with the local and regional authority

- 2. Fulfilling its corporate social responsibility mission, for example by**
 - a) Becoming involved in Regional Social development strategies that will enhance learning
 - b) Supporting local community organisations involved with learning
 - c) Encouraging employees to get involved with the learning region active citizenship strategy
 - d) Include an element of new learning in the promotion of cultural events in the region
 - e) Including community contribution in personnel continuous development strategies and allowing a proportion of time to carry it out
 - f) Sponsoring and participating in regional learning celebration events eg learning festivals
 - g) Participating in 'Learning at Work' days
 - h) Sponsoring competitions involved with learning

- 3. Entering into partnership with local schools in a variety of ways, for example by**
 - a) Participating in mentoring and telementoring schemes with pupils
 - b) Providing work experience for pupils

- c) Providing short term secondments for school staff
- d) Setting up close cooperation Twinning schemes with local schools
- e) Including teachers on management development courses
- f) Facilitating displays of schoolwork on company premises
- g) Commissioning art and design works from the school
- h) Encouraging employees to act as school governors and school committee members
- i) Allowing the use of company training facilities

4. Entering into partnerships with universities, for example by :

- a) Developing and delivering on-site courses relevant to the company's continuous development programme
- b) Developing and delivering relevant higher degrees for company personnel
- c) Initiating joint research and development projects relevant to company needs
- d) Exchanging personnel between university and company
- e) Providing student placements
- f) Sharing facilities, resource and expertise

Similar lists can be made for Universities, Schools, the local authority and Adult and Vocational Training Organisations, and indeed the *Limerick Declaration*, an index resulting from the European Commission's *PENR3L* project, does that for the first two of these. This more compassionate world of the holistic sharing and caring learning city, is clearly not the world of Milton Friedman's inflexible and one-dimensional neoliberal dictum that 'the business of business is business.' By expanding their horizons, these organisations become *learning organisations*, empowering their workforces, frequently monitoring and measuring their own capital development performance and including in it their contribution to the local, national and global world, both separately and jointly with other organisations. In 2004 the European Commission's *R3L project* (Regions of Lifelong Learning) created 'Stakeholder Audits' (Osborne and Longworth, 2005), tools to enable schools, local authorities, universities, adult education and SMEs to learn how to become learning organisations in a learning city. They are available, with many other tools, from <http://eurolocal.info>.

But of course, educational and business organisations are not the only contributors to the realisation of capital potential in a city. Other civil society organisations, such as police, hospitals, communities, museums and libraries play their own part, as do citizens themselves and their families when they are mobilised to do so.

The key activators of such constructive engagements are effective communication and mobilisation – a sophisticated city communication system to motivate organisations, communities and citizens to understand what, why and how people and organisations can contribute - mobilisation to make it happen. This may require a formal system, as in Brisbane (volunteering Queensland), to connect talents, skills, experiences and knowledge with the opportunities to make use of them. Or it can be a much more ad hoc process relying on word of mouth. Media organisations are particularly interesting in this scenario. They wield considerable influence on the minds and actions of people, and can play an important part in creating a positive ambience in a city that people and organisations would want to support.

Capital from Abroad

A city's social, cultural and community capital can be imported from abroad. For example, cities in the richer countries become mentors for cities in the poorer ones, exchanging ideas, expertise, opportunities and finance and increasing the receiving city's store of capital (Allwinkle and Longworth, 2006). Figure 6 below elaborates on this, where Nairobi, a city with the typical problems of the developing world can profit hugely from the institutional links established with cities from the developed world.

- School to school to open up the minds and understanding of young people and increase the potential for future capital growth
- University to University in joint research and teaching to spread intellectual capital
- College to College to allow adults of all ages to make contact with each other and increase understanding, perceptiveness and human capital in all partners
- Business to business to develop trade, commerce and economic capital
- Hospital to hospital to exchange knowledge, techniques and people, thereby boosting health capital
- City Administration to City Administration to exchange knowledge on matters that enhance governance capital, expertise that promotes good practice and leads to a more prosperous city socially, economically and environmentally
- Person to person to break down the stereotypes and to build community capital through an awareness of, and tolerance for, other cultures, creeds and customs

Such partnerships can be bi-lateral or multilateral. They can lead to trade links, expertise and/or people exchanges, joint research and development projects, shared educational programmes at all levels, and promote the inward investment of many types of capital into the city.

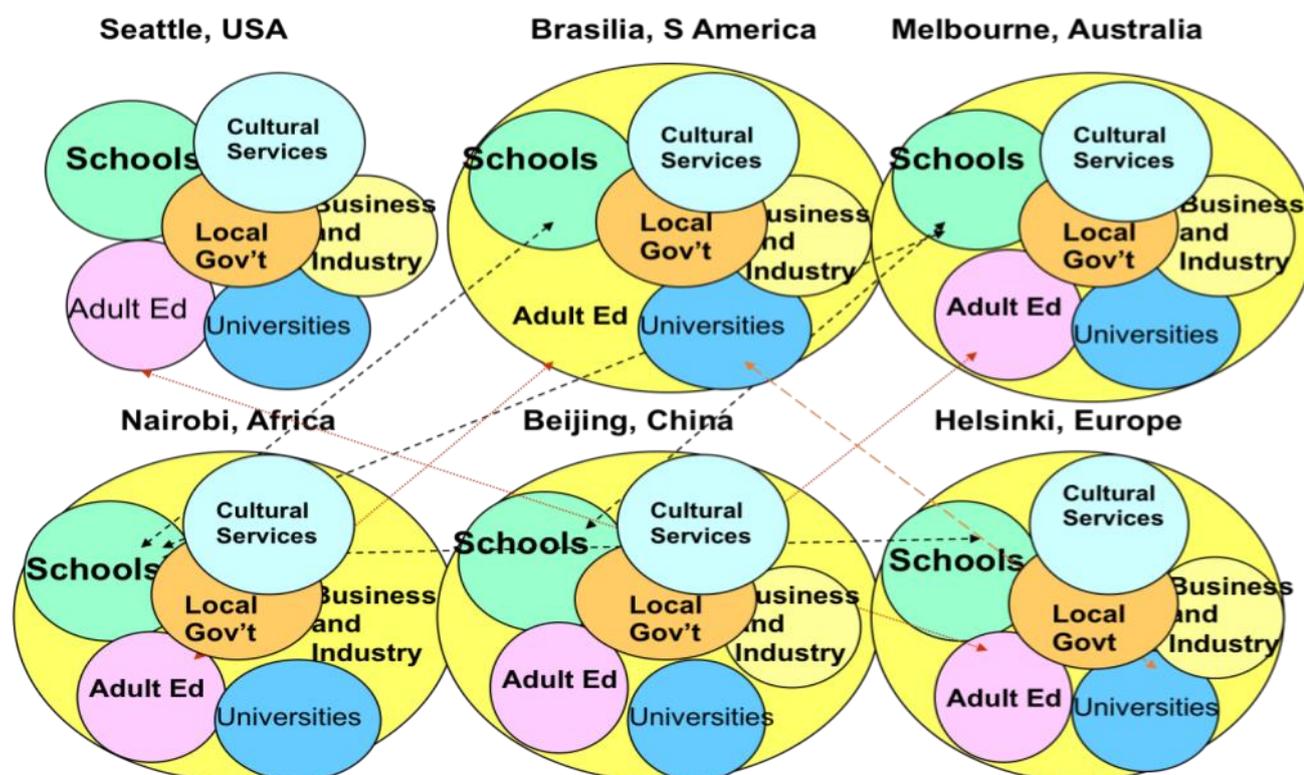


Figure 6 : Importing Capital

But of course not only the developing world cities benefit from such links. The exchange of know-how, expertise, knowledge, ideas, research and experience between all cities can have a beneficial effect on their capital growth. And not only in economic terms, but also in such less measurable assets as tolerance, thoughtfulness, open-mindedness and respect. Networks of learning cities, such as liveable cities, cities of opportunity, the UNESCO Global Learning Cities network and others, have that potential to increase their social potential exponentially – for example, at conferences and seminars, through bilateral and multilateral links between partners, electronic forums, joint research and exchanges of key people.

Social and Environmental Value

Perhaps the argument revolves around the capital value to be obtained, rather than the capital cost to be expended. While the economic value of products and services can be relatively easily worked out in relation to demand, quality and usefulness to the buyer, the value of social and environmental actions

is often ignored in the city's inventory. For example, the strategies developed to keep offenders from re-offending, incur an initial cost in the psychological, educational and rehabilitation services made available to them, but this is repaid manyfold in the contribution that rehabilitated offenders subsequently make to the economy, and the gain from not having to provide so many expensive prison places. Does not a life saved, a youngster with new aspirations, a community reborn, an immigrant well-integrated, a population redolent with health and well-being, profit both the nation, the city, the individual, the planet? Perhaps we need a new definition of profit which takes into account 'soft' profit, the sort that results from the many benefits that a just society can provide for every citizen. And one that recognises that one less Amazonian tree felled or burned is a profit for humankind.

The value of the return on such an investment is broadly social and environmental, but it is no less valuable. Social harmony and pulling together also has an economic value, as many multinational companies with a strong corporate culture will testify. though economists steer clear because of the difficulty of measuring it. The Philips health and well-being index, which concludes that '*overall health & well-being in a country does not seem to be linked to higher income or GDP levels*' (Philips Institute, 2010), and the efforts in some countries to develop a 'happiness index' (as in the Earth Institute's 'World Happiness Report,') are consistent with the new thinking.

Solutions are rendered more urgent by the spectre of climate change and environmental degradation. The earth's resources are finite, and only more visionary sustainable development programmes can conserve it for future generations. Jeffrey Sachs of the Earth Institute again '*If we continue mindlessly along the current economic trajectory, we risk undermining the Earth's life support systems – food supplies, clean water, and stable climate – necessary for human health and even survival in some places*' (Sachs). Ultimately it comes down to education, or more appropriately learning, lifelong. This where the world of economics and capital growth meets the world of lifelong learning. A society kept in ignorance by its media, its political, business and religious leaders, and its lack of the ability to exercise critical judgement, will not make the adjustments the planet needs in order to survive. Ten thousand and more environmentally, socially and economically aware people, all helping their own city to prosper sustainably, have a value well beyond the limits of the accountant's ledger. It is also why current thinking in the Learning Cities field includes, as essential ingredients, the vital importance of sustainability, the growth of a human-centred economic development model and the provision of the best health-care and educational opportunity for all, including seniors at risk of physical and mental deprivation. The utilitarian, market-driven approach is unlikely to create any of these.

Summary

This paper argues that the present narrow definition of capital to satisfy economic and labour market rationales is inadequate to measure the depth and diversity of a learning city's operations and aspirations. It suggests that each aspect of capital should be defined in terms of potentials and the new resources which these potentials create in a complex iterative system. In so doing, it suggests that the obsession of traditional social capital for example with social networks a la Bourdieu, Coleman and Putnam, whatever the differences between them and important though they may be, is insufficient to describe the richness and diversity of social activities within a Learning City. While the three major zones of activity within a city are economic, social and environmental, there are many capitals within these categories that contribute to the growth of a city – cultural, organisational, community, intellectual, energy, industrial and so on. The interplay between them is complex and often overlapping, but learning, whether formal, informal or non-formal, is the substance that holds all of them together and allows them to flourish. That learning must be lifelong and include the notion of contribution.

Thus, cities can mobilise a large variety of 'capitals' to create economic prosperity, social stability, well-being and a wholesome environment. Not least among these is that which derives from fruitful interaction with institutions and people in other cities. The extent to which they are successful in mobilising both institutions and people to contribute their talents, skills, expertise, know-how and

experience in the common good will determine their future prosperity however it is measured – financially, socially or environmentally. Finally there is the question of valuing social and environmental capital in terms of benefit and soft profit. This is linked to lifelong learning and the desperate need to sensitise whole populations to the peril that faces our only planetary habitat from climate change and environmental meltdown. Standard profit-oriented neo-liberal economic thinking has no answers for that, nor for matters of social justice, and the efforts of super-rich USA capitalists to finance a self-serving climate change disinformation campaign (Guardian, 2013) makes a mockery of rational response to the peril that faces the planet.

Finally, perceiving the nature of capital in a new and different way can ensure a smoother transition to a post-capitalist society, but that is a different story to be told at a different time.

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