

Trends Shaping Education 2014 Spotlight 3

Urban Life: The Rise of the Megacity

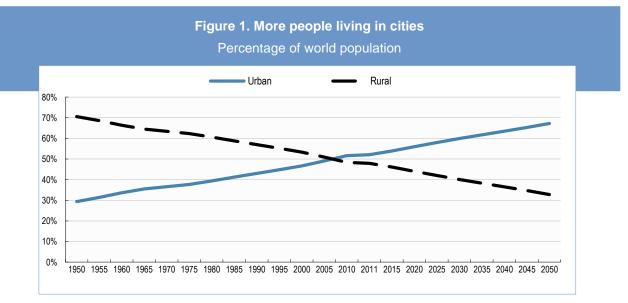
Today, more than half of the world's population live in cities, and this ratio is projected to increase to seven out of ten people by 2050.

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The growth of urban areas resulting from natural increases in population and migration from rural areas is a global phenomenon.

While the majority of the projected growth will unfold in developing

countries in Asia and Africa, forecasts show that the population living in urban areas across the OECD could expand to 85% on average by 2050. In some countries, such as Belgium, Iceland and Japan, this figure is projected to be as high as 95% (OECD, 2013a).



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2011 Revision, 18 November 2013.



Urban environments ¹ attract people from rural areas and foreign countries hoping for better economic prospects, easier access to, and more diverse options for, public services such as education and health care, as well as a wider variety of cultural institutions. Large urban areas, and the improved mobility and productivity associated with them, attract human capital that can also stimulate research and development, making them a regional nucleus for growth and innovation.

However, urban areas are confronted with a paradox: they concentrate wealth and employment opportunities, but they can also

host high levels of poverty and labour-market exclusion. Furthermore, the agglomeration of workers and firms is often accompanied by negative externalities, such as more tenuous social networks and disconnection from family and community, which can engender social alienation and violence. For many OECD countries, exclusion and poverty have become primarily urban phenomena, the consequences of which are a higher level of criminality. On average, the urban crime rate is 30% above the national level (Kamal-Chaoui and Sanchez-Reaza, 2012).

The role of education

Historically, education has been an important element in combatting exclusion and poverty and has also played a key role in the development of urban economies.

Educational investment in cities helps develop a region's human capital, which in turn is related to higher levels of innovation in the medium term. According to the OECD Regional Growth Model, the development of human capital is more important to an economy's long-term competiveness than its infrastructure. Policies that promote infrastructure will thus only be successful if human capital and innovation are also developed (OECD, 2009).

Education clearly has a role to play in supporting and nurturing urbanisation. The rise of urbanisation thus poses both opportunities and challenges for education across OECD countries – most notably, in developing policies that will ensure that education thrives in tandem with increasing urbanisation.

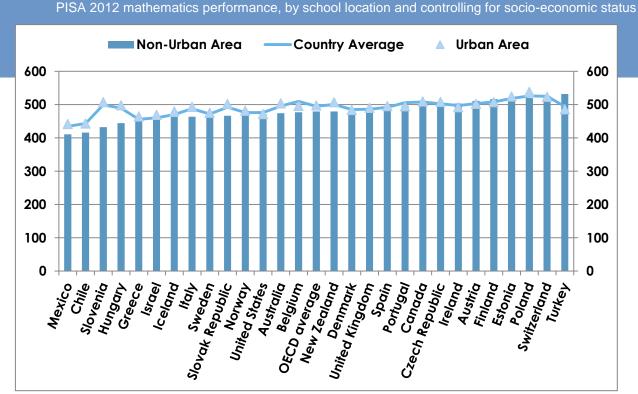
¹ For a discussion on definitions see Kamal-Chaoui and Sanchez-Reaza, (2012).

The urban advantage

Research from the OECD's Programme for International Student Assessment (PISA) reveals that students living in cities with more than 100 000 inhabitants have an urban advantage. Students who study in urban areas scored on average 20 points higher in PISA 2012 than students in small towns and rural schools even after controlling for socio-economic status (which is generally higher in cities). This urban advantage is on average equal to half a year of schooling and is particularly large in countries like Hungary, Mexico and Slovenia who have particularly high gaps between urban and rural schools (OECD, 2013c).

This performance gap can be attributed to a number of factors, including higher socio-economic status of the students attending urban schools. In addition, schools in urban centres are generally larger and more autonomous and might therefore be better able to allocate resources and retain qualified administrative and teaching staff.

Figure 2. The urban advantage in student performance



StatLink http://dx.doi.org/10.1787/888932964832

Note: Schools located in cities of more than 100 000 people are considered urban while schools that are located in less-populated areas are referred to as non-urban.

Source: OECD PISA 2012 database.

However, not all OECD countries manifest this urban advantage. Students studying in urban and rural areas do equally well in Portugal and the USA. And in countries such as Austria, Ireland and Turkey, urban students do more poorly than their rural counterparts.



These patterns highlight the complexity of the issue. Elements outside of education are key, including differences in resources, immigration policies and labour markets. The wealth of cultural opportunities and science institutions in urban environments expose young people to a diverse set educational of and career opportunities that are largely unavailable in a rural setting. Such experiences can inspire, motivate, and challenge children to achieve more.

The potential to stimulate creativity and innovative thinking can manifest in surprising ways: for example, there is evidence that arts education has made contributions to the innovation process in OECD countries (Winner et al., 2013). The PISA findings suggest that school systems can better leverage the cultural and social advantages available in urban environments.

It is thus important to address urban inequities that can undermine children's access to quality education, such as unequal allocation of educational resources, lack of access to cultural institutions, residential segregation in major cities, higher concentration of single-parent families, and more disparate income levels. Only then can students benefit from the opportunities unique to an urban environment mentioned above.

Urban classrooms to mirror diverse societies

From 2001 to 2011, 40% of total population growth across OECD countries was due to international migration. During this period the foreign born population increased by 2.3% and now makes up 12.5% of the total population in OECD countries.

On average, 60% of foreign-born live in the most highly urbanised areas of their host countries, versus 44% of the native-born population (OECD, 2012a). If these trends continue, the urban student population will become increasingly diverse.

Education can provide training and language skills as well as transmit norms that can facilitate immigrants' integration into labour markets and their adopted country. It can also teach all students – not just the new arrivals – about the importance of tolerance and the benefits of cultural diversity.

In some countries, socioeconomic segregation may become entrenched in marginalised areas of maior cities. On average across the OECD, students with an immigrant background tend to have less access to educational resources and their parents, on average, are less educated and work in lower-status occupations.

This has important implications for a number of educational governance issues. Decisions about funding and resources, school autonomy and school choice must also pay attention to equity and access to educational opportunities. In systems with high segregation, particular care must be taken to avoid increasing inequity and the restriction of education offerings to those students who are most in need.

Thus, schools will need to continue to play a role in integrating new arrivals at the same time that they continue to develop students from urban environments. As schools become microcosms of our progressively more diverse society, they have the opportunity to prepare children for our increasingly heterogeneous, more global and less locally connected world.

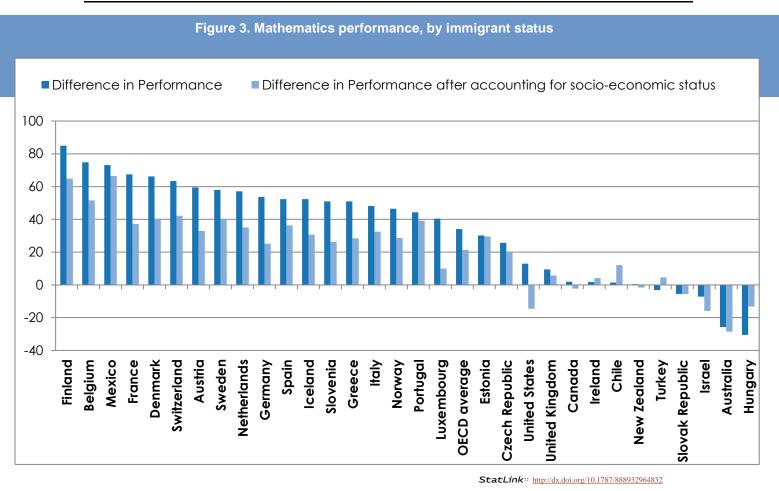
Diverse student populations and performance

PISA results show a significant and sustained performance gap on average between immigrant and native student populations, especially in European countries. The PISA 2012 results show that first generation immigrant students score on average 34 points lower in mathematics than their native-born counterparts.

Once socio-economic status of parents is taken into account this gap is reduced, but is still sizable: 21 points, equal to more than half a year of additional schooling (OECD, 2013c). In some countries like Finland and Mexico, the performance gap is particularly high (one and a half years of schooling) even after controlling for socio-economic status.

The performance gap between native and immigrant students differs markedly between first and second generation immigrants and is also much larger when the language used in the PISA test is not the same as the student's native tongue.

However this performance gap is not inevitable. Some countries, notably Germany, have been very successful at reducing it. And in countries like Canada, Ireland, and the UK native and immigrant students perform equally well. In Hungary and Australia, immigrant students perform better than their native-born peers (see Figure 3).



Note: In the United Kingdom, Canada, Ireland, Chile, New Zealand, Turkey, Slovak Republic and Israel there is no statistically significant difference in test scores between immigrant and non-immigrant students.

Source: OECD PISA 2012 database.

Meeting the urban challenge

These performance differences underline areas where public policy can make significant improvements in securing high-quality instruction for the larger and more diverse student populations forecasted for urban areas. The different patterns may be influenced by immigrant families' choice of host countries as well as the selection process of a country's immigration policies. For example, certain countries might target immigrants from specific countries, or prioritise immigrants with higher levels of education and skills.

One key element is the importance of adequately **preparing teachers for diversity in their classrooms**, both during initial teacher education and ongoing in-service education. This includes working with the **teacher educators** themselves as well as planning for mentoring and coaching of teachers in particularly diverse – usually urban – schools (OECD, 2010c).

Education's expanding role in urban society

Urban safety

In densely populated regions, poor social cohesion and rising inequality can lead to conflict and tension. Particularly in diverse urban areas the "other" (i.e. people from different racial and cultural backgrounds) is often the target of discontent and the scapegoat for grievances.

A survey of 50 countries found a strong positive correlation between a city's annual growth rate and murder rate.

Attempts to improve the security and safety of urban environments often rely on schools as a way to reach out to young people at risk. However, there is a real question about the responsibility of schools in preventing crime and improving public safety. Youth at risk are more likely to drop out of school before completing their studies, and can therefore not be reached by standard school-based programmes. Furthermore, teachers are already charged with an important educational mission that does not necessarily overlap with a demand for crime prevention. Strategies to reinforce urban safety therefore require the involvement of multiple sectors and stakeholders.

Building child-friendly cities

The Child-Friendly Cities Initiative – launched by UNICEF and the United Nations Human Settlements Programme (UN-Habitat) in 1996 – is the first multi-stakeholder partnership to include children in the urban planning process.

The initiative involves children in the governance and development of their communities through a strong participatory approach on key topics. Areas include managing school and early childhood facilities, planning and design of community recreation areas, assessing and monitoring physical environment in their neighbourhoods and the of running children's organizations.

The methodology is based on case studies from nine countries representing a variety of geographic, socioeconomic and cultural contexts: Brazil, the Dominican Italy, Jordan, Morocco, Republic, France, the Spain and the Sudan. Philippines, Tracking improvements in child well-being over time is an important component of the initiative.

More information: http://www.childfriendlycities.org

However, in addition to ensuring academic excellence, schools will continue to be called upon to strengthen bonds within the urban community by helping young people develop skills in non-academic areas such as tolerance, conflict resolution, and civic participation.

Imparting children with a sense of civic responsibility can also help establish ties to their community. Evidence from a recent study involving students from public high schools in Chicago suggests that civic learning opportunities in schools have more impact on students' commitments to civic participation than a number of other factors, including participation in after-school extracurricular activities (other than sports) and school supports for academic and social development (Kahne et al., 2008).

Health and well-being

One area that requires particular policy attention is the issue of physical and mental health in urban areas. A lack of green space and greater intensity of both traffic and industry are linked to higher pollution in urban areas, which in turn creates risks for respiratory health and cardiovascular disease, both related to premature death. Higher noise levels, for example in schools near major roads or on the flight approach to airports, have also been associated with delays in learning and poorer academic achievement (OECD, 2013a). In response to this, a number of OECD countries are directly addressing urban air and noise pollution with a special eye on schools.

In addition to these well-known physical effects, a growing body of research indicates that being raised in a large urban area is associated with greater lifetime risk for anxiety and mood disorders for adults as well as young people (Lederbogen et al, 2011). The social anonymity and tenuous community networks that often characterise urban life can have negative effects on young people's mental health, particularly if they live in poor areas (Black et al., 1998).

Children and adolescents in urban areas are also more likely to internalise problematic behaviours such as aggression and substance abuse (Evans, 2011). Schools have begun to take a more active role in promoting mental and physical health, and teachers are increasingly relied upon to detect students who are showing signs of withdrawal and alienation and to effectively model positive social behaviours (OECD, 2013a). School-based intervention programmes to help students establish a sense of connectedness to their school can be a strong preventive factor against violent and risky behaviours (World Bank, 2008).



Schools in an urban landscape

Cities that succeed in forging strong social ties between young people and the community they live in use collaborative urban planning and infrastructure development efforts that bring together governments, community leaders, education policy makers, parents and children.

A well-designed school maintains a strong relationship with its urban environment and establishes links to the network of learning that surrounds it. It also provides flexible learning spaces that can foster positive learning environments, such as state of the art learning facilities and social areas where teachers and students can interact (OECD, 2011).

Designing a school for the community Golden Lane Campus, London

Nestled in the dense city of London, the Golden Lane Campus is a promising example of how well-designed schools can enrich the community and create a sense of connection and accessibility.

Built in 2008, the educational centre meets primary students' social and educational needs with internal spaces that are filled with light and make use of natural ventilation. The external spaces provide an uplifting environment while ensuring safety and security.

The campus serves the local community by offering courses on healthy eating and childcare, free legal advice for local residents and a drop-in centre for teaching parenting skills. The design incorporates energy efficient features that help reduce operation expenses.

More information: http://www.islington.gov.uk/services/children-families

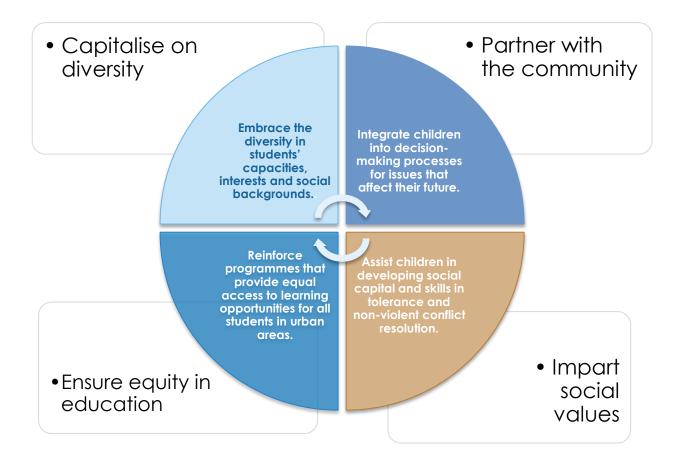
Visible investments in school infrastructure can create an atmosphere that conveys the community's commitment to education and growth, improves long-term efficient use of resources, promotes social inclusion of more vulnerable groups, and establishes education equity and equal opportunities for students.

Simple measures, for example installing racks to store skateboards alongside student lockers, can optimize space in the urban environment. Research from Belgium (Flanders) has demonstrated that students attending schools with good quality infrastructure rated themselves as more satisfied compared to students in schools with poor infrastructure. Variables that were related to increased perceived well-being included classrooms open onto a green outside area (when possible) and having well-integrated ICT throughout the school building (OECD, 2011).

In sum

Governments are faced with a number of unique opportunities and responsibilities for their urban schools. They must harness the cultural and intellectual resources available in densely populated metropolitan areas, and, in tandem, focus on the fair distribution of educational resources. They must seek ways to build tolerance, strengthen social cohesiveness, and assist children in developing skills in non-violent conflict resolution.

Urban schools can work to cultivate a healthy sense of belonging for students within their family, their school, and their peers. Initiatives that integrate children into the decision-making process for issues that affect their future as well as the urban landscape promote civic engagement and forge long lasting ties within the community. Urban education plays a central role in shaping young people's future prospects for social and economic inclusion.



References

- Black, Maureen M., and Krishnakumar, Ambika (1998), "Children in low-income, urban settings: Interventions to promote mental health and well-being", *American Psychologist*, Vol. 53, No. 6.
- Evans, Gary W. (2011), "The Built Environment and Mental Health", in Krug, Etienne, et al., (Eds), World Report on Violence and Health, World Health Organization, www.who.int/violence_injury_prevention/, accessed 21 September 2011.
- Kahne, Joseph E. and Sporte, Susan (2008), "Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation", American Educational Research Journal, September 2008, Vol. 45, pp. 738-766. doi: <u>10.3102/0002831208316951</u>, accessed 5 July 2013.
- Kamal-Chaoui, L. and J. Sanchez-Reaza (2012), "Urban Trends and Policies in OECD Countries", OECD Regional Development Working Papers, No. 2012/01, OECD Publishing. doi: <u>10.1787/5k9fhn1ctjr8-en</u>.
- Lederbogen, Florian, Kirsch, P., Haddad, L., Streit, F., Tost, H., Pruessner, J., et al. (2011), "City living and urban upbringing affect neural social stress processing in humans," Nature 474, pp. 498-501, 22 June 2011.
- OECD (2009), How Regions Grow: Trends and Analysis, OECD Publishing. doi: <u>10.1787/9789264039469-en</u>.
- OECD (2010a), PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II), PISA, OECD Publishing. doi: <u>10.1787/9789264091504-en</u>.
- OECD (2010b), PISA 2009 Results: What Makes a School Successful?: Resources, Policies and Practices (Volume IV), PISA, OECD Publishing. doi: <u>10.1787/9789264091559-en</u>.
- OECD (2010c), Educating Teachers for Diversity: Meeting the Challenge, Educational Research and Innovation, OECD Publishing. doi: <u>10.1787/9789264079731-en</u>.
- OECD (2011), Designing for Education: Compendium of Exemplary Educational Facilities 2011, OECD Publishing. doi: <u>10.1787/9789264112308-en</u>.
- OECD (2012a), Settling In: OECD Indicators of Immigrant Integration 2012, OECD Publishing. doi: <u>10.1787/9789264171534-en</u>.
- OECD (2013a), Trends Shaping Education 2013, OECD Publishing. doi: <u>10.1787/trends_edu-2013-en</u>.
- OECD (2013b), International Migration Outlook 2013, OECD Publishing. doi: <u>10.1787/migr_outlook-2013-en</u>.
- OECD (2013c), PISA 2012 Results: Excellence Through Equity: Giving Every Student the Chance to Succeed (Volume II), PISA, OECD Publishing. doi: <u>10.1787/9789264201132-en</u>
- Winner, E., T. Goldstein and S. Vincent-Lancrin (2013), Art for Art's Sake? The Impact of Arts Education, Educational Research and Innovation, OECD Publishing. doi: <u>10.1787/9789264180789-en</u>.
- World Bank (2008), Youth at Risk in Latin America and the Caribbean: Understanding the Causes, Realizing the Potential, World Bank, Washington, D.C.

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