City Education Innovation

Models for delivering schools in urban renewal

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urbis

Outline of presentation

- 1. Why worry about schools?
- 2. Education outcomes a global comparison
- 3. Should we worry about a schools shortage?
- 4. Impediments in delivering schools in Australian cities
- 5. Imagining built form possibilities

1. Why worry about schools?

Schools are the foundation of our future - they nurture the future workforce and drive the economy.

Schools are crucial to creating liveable cities - where our children learn, grow and develop.



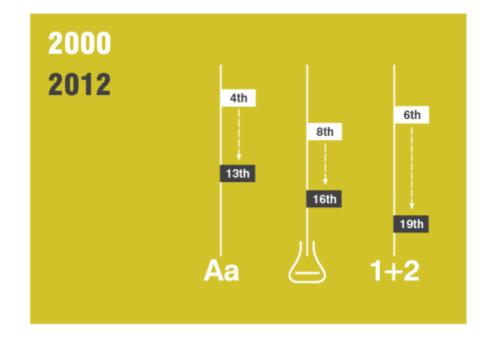
Education is a key driver for productivity, economic prosperity and global competitiveness.





2. The OECD Program for International Student Assessment (PISA)

- Reading, maths and scientific literacy of 15-year-olds in >70 economies every 3 years
- Australia's falling international ranking



2. The OECD Program for International Student Assessment (PISA)

- Australian real scores have declined since 2000, while other countries have improved
 - In 2000, Australia was on par with South Korea's results
 - Compared to Korea: our 15-year-olds are now 3 years behind in maths and science

2. The OECD PISA Top Rankers

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1. Shanghai-China



2. Singapore



3. Hong Kong



4. Taiwan



5. South Korea

3. Should we worry about a schools shortage?

Growth challenge - NSW



300,000

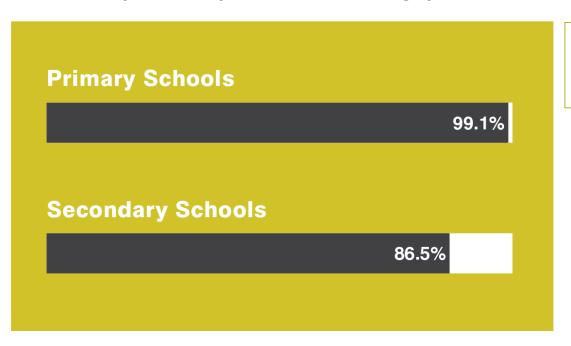
more students by 2031

+24% increase



Schools already have limited capacity - NSW

Utilisation of permanent public school teaching spaces



 15% of classrooms are demountable

Education – an affordability issue in NSW

Families

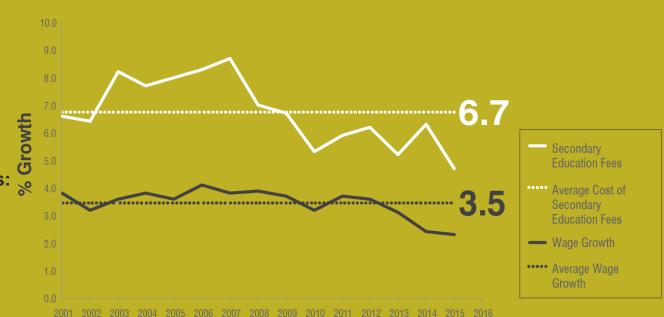
Secondary school fees increasing at double the rate of wage growth

Annual secondary school costs:

Government \$4,829

Catholic \$13,393

Independent \$27,289



Extent of challenge - NSW

by 2031 we would need

6,250 more classrooms



We would need to build

417

new classrooms per year starting now



New models needed - NSW

Under existing models equivalent to:

307 213 new primary new secondary schools schools

We would need to build:





4. Impediments in delivering schools in Australian cities



4. Significant systemic, policy and funding issues to delivering schools









Availability of land and development pressures - NSW

We would need almost

2,000 ha

of additional land to meet future demand under existing models



Existing models of school delivery are land intensive

Primary school site

2.3 ha

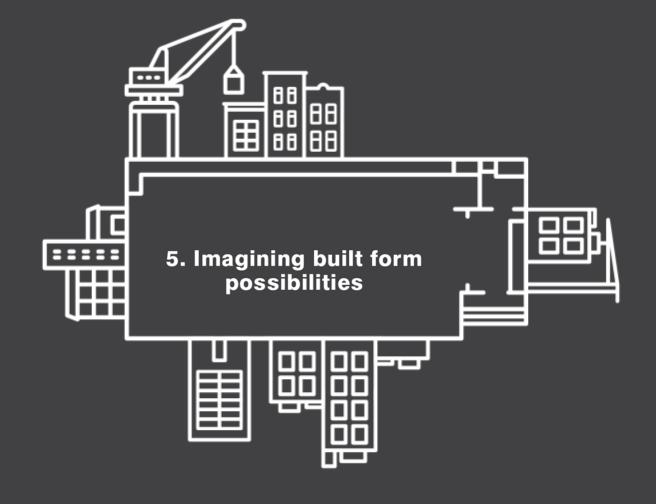
Secondary school site

6-10 ha

Capital and land costs - NSW

capital and land costs





5. Imagining built form possibilities

Can we have schools in shopping centres?



Simon Youth Academy in 25 US malls Can schools be integrated into university campuses & TAFEs?



University of Philippines Integrated School, improving pathway from secondary to tertiary education Can existing schools transform to provide more places within the same land area?



Singapore International School, Hong Kong - 1,400 students across 4,000 sq.m site



Lycee Francais, Bogota - 2,000 students across a 1.5 ha site

Simon Youth Academy in 25 US shopping centres

Can we have schools in shopping centres?



Simon Youth Academy in 25 US malls

- Northshore Mall, Peabody Massachusetts
- Jointly funded by the Simon Youth Foundation, city council and local businesses
- 427 square foot for 40 students
- Caters to high school students at risk of dropping out
- Improved completion rates to 90%

University of the Philippines Integrated School

Can schools be integrated into university campuses & TAFEs?



University of Philippines Integrated School, improving pathway from secondary to tertiary education

- Primary and secondary education in the country's best university
- Federal funding
- Started in 1961
- Feeder school into the university

Lycee Français, Bogota – urban renewal

Can existing schools transform to provide more places within the same land area?



Singapore International School, Hong Kong - 1,400 students across 4,000 sq.m site



Lycee Francais, Bogota -2,000 students across a 1.5 ha site

Lycee Francais, Bogota

- K-12 private school
- Surroundings gradually transformed from suburban mainly detached dwelling neighbourhood to mixed use high density
- Continuously expanded to cater to increase in local residents and demand over the last 30 years within the same site area

Singapore International School – high density adaptive reuse

Can existing schools transform to provide more places within the same land area?



Singapore International School, Hong Kong - 1,400 students across 4,000 sq.m site



Lycee Francais, Bogota -2,000 students across a 1.5 ha site

Singapore International School

- Secondary school
- Adaptive reuse and partial rebuilding of a 30 year disuse public school
- 14 storey facility
- Joint federal funding by Singapore and Hong Kong governments

Some over-riding best practice principles

Co-location with Other Services and Facilities

Co-location of schools with transport nodes and other local day-to-day services and facilities creates efficiencies in everyday life through reducing trip generation. Additionally it also helps to supports local business and facilities by making it easier and more convenient for people to use them. In turn this creates a market for local businesses.

Benefits:

- Better access to public transport
- Reduction in trip generation
- Support of local businesses and services



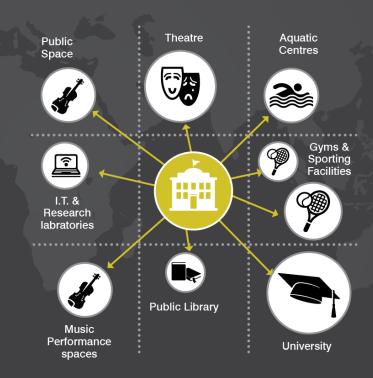
Some over-riding best practice principles

Utilisation of Existing Facilities

Schools of the future will need to utilise surrounding high quality specialist facilities as they have less room to grow. Schools can benefit from access and proximity to the highest order facilities and services within the area. The efficient use of these facilities by multiple user groups means people have access to the very best facilities and the facilities are maximising their return. There are many facilities within a city that school can utilise rather than build their own including sporting facilities, creative arts and theatres, research and IT laboratories and the public spaces and parks.

Benefits:

- Efficient and maximum use of existing facilities
- Potential access to higher order / quality facilities
- Populate the city with a more diverse socio-economic mix of people
- Encourage collaboration and learning outside a specified curriculum
- Allow schools to operate within a minimal footprint



CONNECTED MOMENTS OF BRILLIANCE