Population Geography and Development Geography: Connected Learning

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image source: Pudgeefeet

Population Geography and Development Geography are strongly intertwined. In the current NSW syllabus teachers and students can engage with these two units in the Preliminary Stage 6 course. Population Geography is a mandatory component of the Global Challenges topic, and Development Geography is a study option amongst other Global Challenges units. Whilst the conventional approach to teaching the syllabus is to prepare and deliver learning activities first for the whole of Population Geography, then - if chosen - for the whole of Development Geography, there is a very good argument for enmeshing the two units into a combined unit: Population and Development Geography. Reasons to enmesh the units include the real-world feedback loops from each of the fields to the other, the overlap in the subject matter in the two fields, and the capacity for a teacher to diversify the learning progress for students, to enhance learning engagement.
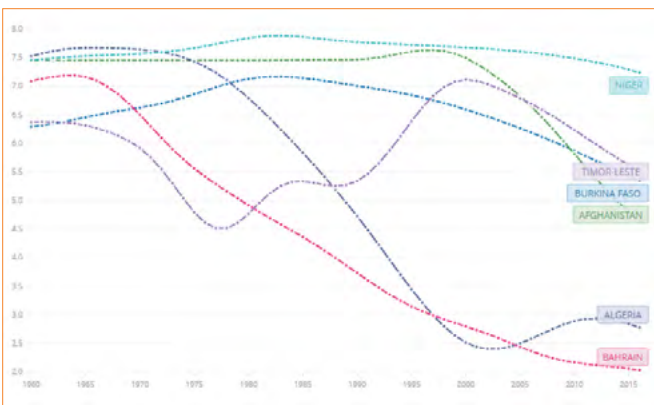
REAL-WORLD FEEDBACK LOOPS

There are real-world feedback loops between Population Geography and Development Geography. Learning activities can highlight both major and non-major influences from each of the fields to the other. A fundamental relationship where demography shapes development is larger families suppressing general development, as the resources of the parents need to be divided multiple times, for example in some countries in the last 50 years up to 7 or 8 ways (refer to Total Fertility Rate graph).

Total Fertility Rate over last 50 years for various countries with high starting values

Source: World Bank

Another fundamental relationship is birth rates being suppressed by increased development – specifically, women being more educated and busier with employment, amongst other factors (see, for example, some discussion by Garbund, 2009). A narrower but still fascinating connection between population and development is low fertility in a region challenging its economic growth. The Japanese are concerned that there are a reducing number of workers in their economy and that productivity losses there might not be offset by other gains, such as from technology (e.g. robots). Added to this is the challenge of the Japanese needing to care for a demographic bulge of economically-dependent older people. Some websites on the Japanese population/development challenge include:

- Japan is running out of its most important asset: Healthy people
- Population of 100 million in 50 years a fantasy requiring a shift in thinking
- Graying Japan increasingly reliant on foreign labor
- Japanese couple apologise for ignoring work pregnancy timetable by conceiving 'before their turn
- Not having children is 'selfish': Japenese politician'

On a different point, the push and pull of population movement is often connected to development - job opportunities, health, education, security, etc. (a good source amongst many here is the UN Department of

Economic and Social Affairs). It is clear that factors studied in Population Geography influence and are influenced by factors studied in Development Geography. Therefore, it is helpful for students to learn about the two units in an integrated way.

OVERLAP IN ISSUES

"Lagos, set to become the largest metropolis the world has ever known. "

Photograph: Pius Utomi Ekpei/AFP/Getty Images Source The Guardian, 2018.

There is an overlap in the issues between Population Geography and Development Geography. For example, there have been historical challenges to the provision of education in poorer regions with a wide-based population pyramid. There are challenges to providing education resources even to upper middle class demographic groups with a wide-based population pyramid, for example in the growth corridors of north-western and south-western Sydney such as in the "Nappy Valley" of the Camden Valley Way area. The challenges are significantly greater in lower socio-economic areas, for example in the 1970s especially in the Green Valley area of south-western Sydney and Blacktown region of north-western Sydney. Some reasons for this are lower financial contributions – in absolute terms - from parents to childrens' educational efforts, and a reduced set of role modelling / expectation setting by parents who were less likely to have done tertiary study, say, and even to be regularly employed in some socio-economic segments. As described above, the social issue of education is common to the topic of population and to development. The *issues arising from the changing size and distribution of population* overlap with the *equity issues of development* opportunities for lower versus higher socio-economic areas. Here are some sources for this broader topic, not just in education:

- The public housing dilemma dividing our suburbs
- Community profiles at profile.id e.g. – Qualifications in Oran Park

- 4Corners *Growing Up Poor*
- Beating the Odds
- Aged over 60 and female? Here's why you might be at risk of poverty
- Video accounts of the 2005 Cronulla riots
- Slumscapes: how residents of the world's five biggest slums are shaping their futures
- Manila: 20 million and rising
- The dysfunctional megacity: why Dhaka is bursting at the sewers
- The 100 million city: is 21st century urbanisation out of control?

MIXED LEARNING FOR ENGAGEMENT

With an integrated Population and Development Geography unit a teacher can mix the learning progress for students so as to enhance learning engagement. There is a diversity of learning opportunities across these two interesting study areas – as the aphorism goes: variety is the spice of life. Population Geography involves, for example, the analysis of the changing population pyramids of different places around the world. Development Geography offers the opportunity, for example, of watching classic videos such as *Kevin McLoud: Slumming It* and Robert Neuwirth's excellent Ted Talks. In these examples, one of the units provides opportunity for students to learn to use a key Geography tool – population pyramids, while the other unit provides the opportunity for virtual immersion in some of the most interesting human landscapes on Earth. There is a myriad of other mixtures available across the two units, and sometimes where Development Geography offers the technical learning (e.g. HDI analysis) and Population Geography offers the immersive experience (e.g. any and all of Hans Rosling's outstandingly student friendly statistical demography videos, which – not coincidentally – include many references to development). An additional benefit of mixing the units is that students can make connections between ideas from different syllabus dot point areas. For example, *spatial patterns of fertility and mortality* (a Population Geography dot point) are an indicator used to illustrate *variations in the level and rate of development at a global scale* (a Development Geography dot point). Conversely, the *nature of development* (e.g. developed versus developing world) is a window through which to look at *the changing nature, rate and distribution of the world's population* (developing world, especially Africa, set to increase markedly, whilst the developed world's demographic changes are not a function of future growth). Integrating the two units into a broader unit allows meaningful juxtapositions of learning activities.

Birth rates graphed against income, colour coded by global region (e.g. Africa in blue, Asia in pink).
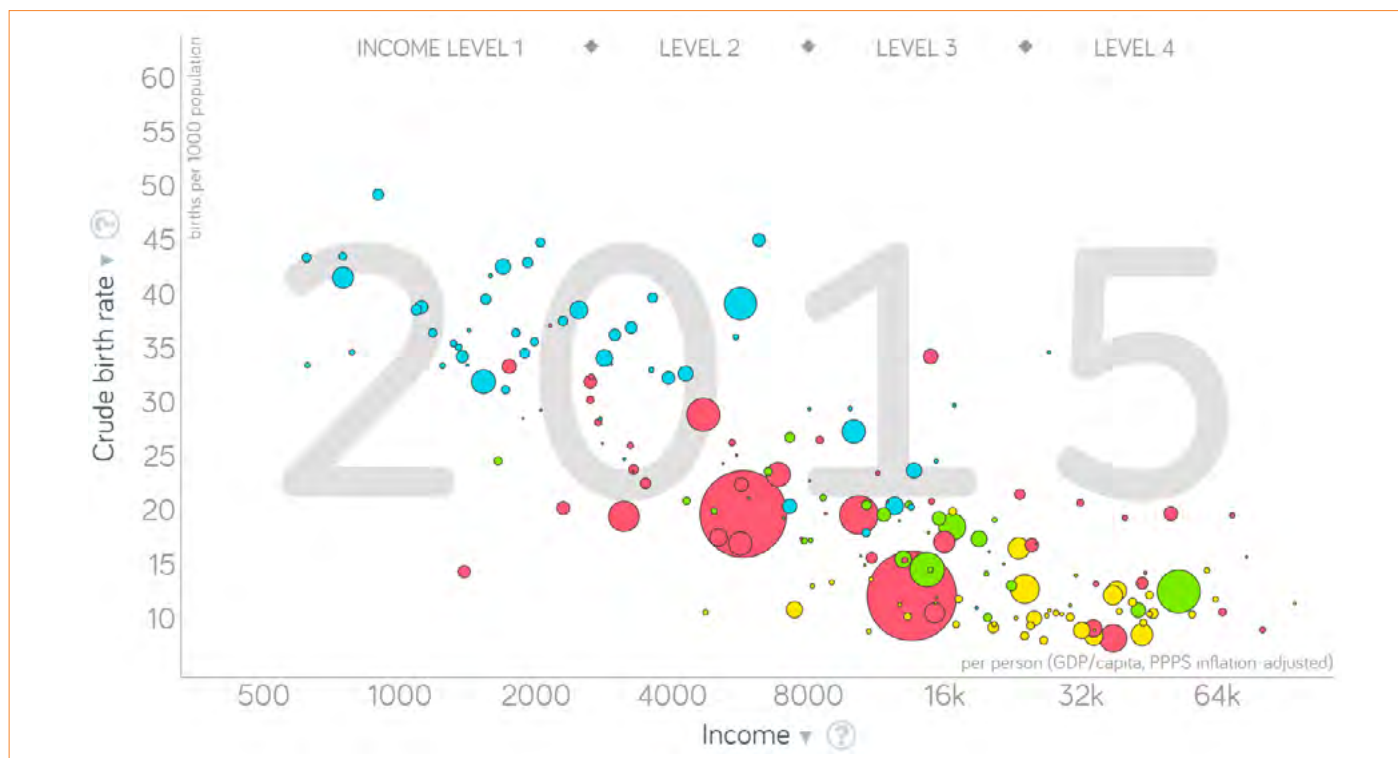
Source: Gapminder

In conclusion, there are strong reasons to enmesh the teaching of Population Geography and Development Geography in the current NSW Preliminary Stage 6 course. There are real-world connections and drivers between the two fields, ranging from fundamental drivers, such as large families generally suppressing development to development suppressing birth rates, to additional interesting linkages such as low fertility in a region (e.g. Japan) challenging its economic growth. There is an overlap in issues between Population Geography and Development Geography, such as the historical challenges to the provision of education in poorer regions that have a wide-based population pyramid. Finally, the approach to the syllabus argued for here allows the mixing of learning activities from two interesting study areas, leading to enhanced learning engagement from diversification and juxtaposition, such as analysing the changing population pyramids of different places around the world and watching classic videos such as *Kevin McLoud: Slumming It*, and from students making connections between ideas from different syllabus dot point areas. For the remainder of the time that the current NSW Stage syllabus is taught, this enmeshed approach is a strong option for teachers, and the philosophy and reasoning underpinning it could well be similarly applied to whatever the replacement syllabus contains. As Hans Rosling says, "don't panic"; we can be "serious possibilists" about global population and development. Using another of Hans' lines, we can "take emotion apart and ... just work analytically with the world" and see that these two units work together to make a meaningful and fascinating larger unit.

Lokmanya Tilak Terminus Flyover slum, Mumbai

YEAR 11 GLOBAL CHALLENGES

A possible teaching programme within the current NSW preliminary syllabus.

Week 1 + the following development dot points:
- The nature of development
- The use of indicators to illustrate spatial variations in the level and rate of development at a global scale

with foundational learning, including links to global population, about:
- definitions of developing and developed (using OECD and other) and MDC / LDC
- HDI as a core focus
- the UN's 2030 Agenda for Sustainable Development
- the triple bottom line of sustainability: economic, social, and environmental
- Hans Rosling's excellent TedTalk (10 min) on how much of the world's population is in various categories of development
- conceptual discussions of development, e.g. why the world bank is eliminating terms
- historical terms such as Global North/South, First/Second/Third World
- the 'world as 100 people', such as the excellent *These 6 Charts Show How the World is Improving*

Week 2–3 + the following population dot points:
- The changing nature, rate and distribution of the world's population
- Spatial patterns of fertility and mortality
- Types, volumes and directions of population movements such as rural-urban migration, labour migration and refugee migration

with activities, involving key connections to development, such as:
- this short but superb Hans Rosling video predicting world population
- a look at more and less developed regions and case study places
- an analysis of population pyramid shapes: e.g. wide base triangle, beehive, tombstone
- a full watch (60 minutes) of Hans Rosling's "Don't Panic"
- student-centred exploration and reporting back to class using the Gapminder tools website
- highlighting the links between migration and development

Week 5–6 + the following development dot point:
- Issues arising from these spatial patterns of development such as access to shelter, social support, health, and educational opportunities

with activities linked to population such as investigating:
- Robert Neuwirth's cities of tomorrow (14 mins), with a supporting discussion of squatter settlements, slums, favelas and shanty towns
- followed by Neuwirth's power of the informal economy (12 mins)
- then 'Kevin McCloud: Slumming It' (48 mins) -- search for it on YouTube
- and development issues in more developed places – see resources in paragraphs above

Week 7–8 + the issues dot points from each section:
- Development – equity issues related to ethnicity, class and gender, and ecologically sustainable development (ESD)
- Population – issues arising from the changing size and distribution of population including environmental, economic and social impacts

using various LDC and MDC case studies that combine each of the following:
- economic impacts of population change with equity issues related to class (e.g. Sydney's latte line)
- social impacts of population change with equity issues related to ethnicity and gender
- environmental impacts of population change with equity issues related to ESD

Geography Teachers Association of NSW

GTANSW TEACHER PHOTOGRAPHY COMPETITION

Entries to be submitted via this GOOGLE FORM

Each month a winner will be chosen from the entries.

These will be published in the GTA bulletin and posted in the GTA Facebook Page for voting.

The monthly winners will go into the draw to be the yearly winner, drawn at the GTA Council Planning Day in October.

This winner will receive a free one-day registration to a GTA event PLUS make the front cover of a Geography Bulletin.

RULES
- **Open to GTA members and teachers from member organisations only**
- **Photos must be the contributors work. Preferably use a watermark.**
- **For any students in the images permission to publish must be given**
- **Each image needs a descriptive caption linked to Geography K-12 in NSW**
- **Ensure images are high quality … minimum 10 megapixels.**
- **GTA will retain the right to use the image in the journal or on publicity flyers with credit given to the owner.**