



Photo courtesy of S. Pradhan

## Australian and Asian trends in internet, mobile and social media usage with student learning

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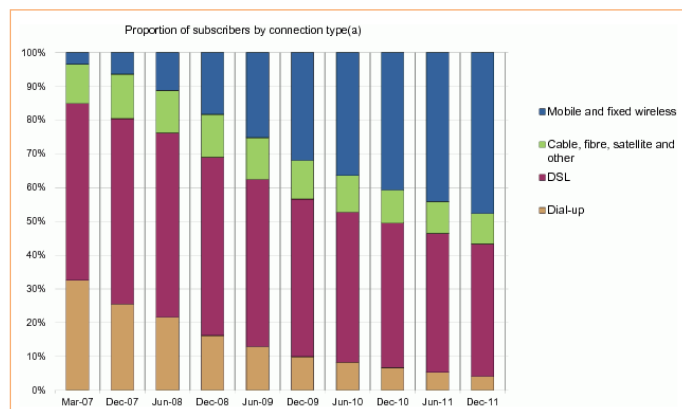
**Recent trends in internet, mobile and social media usage are critical for students' learning in the 21<sup>st</sup> century. Students find the content relevant and the spatial distribution of trends lends itself to geographical knowledge and the analysis of data provides a vehicle for the development of geographical skills. It is essential to show students not to accept information at face value but to teach them how to investigate statistics from an analytical perspective.**

### THE AUSTRALIAN SITUATION

Australian information on internet usage and mobile phone uptake is often linked to figures for Oceania. In June 2011, there were 10.9 million internet subscribers in Australia, representing a 14.8% annual growth.

Figure 1 indicates the decline of dialup and the growth of mobile and fixed wireless which makes for interesting commentary on the National Broadband rollout.

**Figure 1: ABS Trends in Australian Internet usage**



Source: <http://www.abs.gov.au/ausstats/abs@nsf/Lookup/8153.0Chapter3Dec%202011>

In 2009, 841 000 children or 31% owned a mobile phone. About 76% were aged between 12 and 14 years compared to 2% between 5 and 8 years. According to mobicity.com, of the 7 billion people in the world there are 5 billion mobile phones. In Australia 43% of Australians own a smartphone with 26% of them participating in social networks. About 66% of social networkers were under 35 years of age.

The statistics are fascinating, eliciting interesting discussion. Geographers could investigate why Tasmania has the highest mobile phone ownership (41%) out of all the states and territories and why phone ownership between major cities (31%), inner regional areas (30%) and outer regional areas (33%) are relatively evenly spread. Students could investigate: What are the sustainability implications of 14.3 million unused hand sets? What are the societal implications of 11.2 million text messages sent on the phone in 2011? The students identify with this statistical data and at the same time teachers impart geographical skills.

What is the broader issue of mobile phone usage and learning? What are the learning implications of the stranglehold (60%) of Apple iPhone/iOS control on the Australian market? What are the implications of the increasing market share of Android phones? What can schools do about Bring Your Own devices (BYOD) with 83% of teenagers with a mobile phone in their pocket in the classroom?

### Social media

Social media is a growing influence in Australia and around the world. You just look at the Kony 2012 Campaign via the social media aimed to stop the abduction of children in Uganda.

It is encouraging to see recent statistics on social media in Australia. Joanna Fulton of Philanthropy Australia, sourced

information from the ABS Internet Activity Report June 2011, and provided a comprehensive visual breakdown of social media in Australia.

The growth of web tools over the last decade enabled the growth of the social media. The accelerating growth in social media can be linked to the growth of smartphones from 1.2 million (June 2010) to 3.6 million (June 2011). The numbers of users as a percentage of the Australian population of 21.9 million is small, as we have not reached a majority stakeholder usage in terms of population.

What enables a webtool to be considered as social media? My personal criteria involve the notion of Web 2.0 where there is at least a two way flow of ideas, collaboration and communication. Consequently Wikipedia can be viewed as social media because of the way people share and contribute to the site.

Figure 2 shows Facebook and You Tube dominate the social media tools. Facebook captures over 50% of the population. The combination of Blog Spot (the Google blogging platform) and Wordpress indicates 6.6 million people have a blog.

**Figure 2: Social Media Usage in Australia December 2011**

Social Media	Million users/unique users
Facebook	11.0 million
YouTube	9.9 million
Wikipedia	6.7 million
Blogspot	4.6 million
Wordpress	2.0 million
Twitter	1.8 million
LinkedIn	1.8 million
Flickr	1.2 million
Tumblr	1.0 million
My Space	930 k
Photobucket	700 k
Vimeo	390 k
Slideshare	220 k
Stumbleupon	140 k
Digg	100 k
Reddit	100 k
Foursquare	57 k

**Figure 3: Social media age and gender breakdown in Australia**

Feature	Facebook	YouTube	Twitter	LinkedIn
Gender Female/ Male	48%/52%	43%/57%	38%/62%	48%/52%
Dominate age group	31% (0–17 yrs)	34% (0–17 yrs)	33% (45–55 yrs)	32% (45–55 yrs)

All four social media tools are dominated by males: 4% more males use Facebook; 14% more use YouTube; 24% more use Twitter; and 4% more use Linked In. In terms of the dominant age group of usage, 0-17 years make up 31% of Facebook

users and 34% of YouTube users. The leading age group is 45-55 years for Twitter and LinkedIn, comprising 33% and 32% respectively.

## Internet usage in the Asian region

Asia is the dominant region for internet usage with 44.8% of the world's internet usage (December 2011). This is followed by Europe 22%, North America 12% with Oceania and Australia at 1.1%. Asia's population is 3879 million people while internet users are 114 million, comprising 26.2% penetration of internet users. Australia and Oceania together make up 35 million people and the internet population penetration is 67.5 %. Presumably this is due to Australia comprising 22 million of the 35 million, population. Just for comparison North America has 347 million people with a 78.6% internet penetration and the world average is 32.7%. The next step in the classroom is to encourage students to investigate trends in regions within countries.

Figure 4 shows the population figures for a selection of Asian countries and is useful when working with students to convert percentages into figures based on the Face book and Internet users table.

**Figure 4: Population in the Asian Region**

Note: The top 20 countries with the highest number of internet users do not include Oceania and Australia.

Country	Population (million)
Singapore	4.7
Hong Kong	7
Malaysia	28
Thailand	66
Vietnam	90
Philippines	101
Japan	126
Pakistan	187
Indonesia	245
India	1189

Of the top 20 countries with the highest numbers of internet users seven are located in Asia with China topping the list with 23% of the world's population. It is also important for students to understand trends. For example, China had 22 million internet users in 2000 which increased 485 million in 2011. Despite the large number, China has an internet penetration rate of only 36.3%. From 2000 to 2011 India increased from 5 million to 100 million, Japan from 47 million to 99million, Indonesia from 2 million to 39.6 million, South Korea from 19 million to 39 million, and the Philippines 2 million to 29.7 million. Vietnam grew from 200,000 to 29 million, representing the greatest growth for the top 20 country internet user countries in Asia. The rest of the world consists of 2351 million people with 360 million internet users in 2000 and 508 million in 2011 – a growth rate of 24.1%.

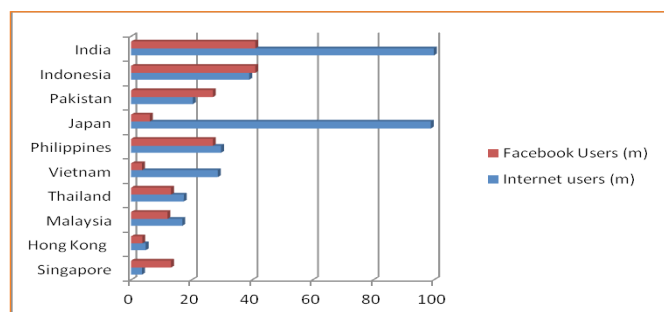
After looking at the statistics teachers encourage students to think about the implications of high internet use in Asia. With millions of users, there is revenue for online companies such as e-business and online commerce. At the same time internet journalism is growing with revenue received from digital news. In 2003 'gaming' Koreans made up 54% of the market followed by Taiwan at 26%.

One final interesting point of discussion with students is the culture of the web. Most students in Australia would associate the web with the English language when in fact Mandarin is currently the world's leading language. This raises the possibility - Chinese could become the largest internet language group in the world.

## Social Media in the Asian region

Internet usage figures tell one story and the adoption of population and internet penetration adds another dimension to the narrative. The following investigation of social media trends provides other useful insights (Figure 5). As of 31 December 2011 the number of Facebook users was 183 million making up 4.7% of the population which compares to 13 million in Oceania/Australia 37.7% and 174 million in North America at 50.3 %. North America has the highest Facebook penetration at 50% followed by Australia at 37.7 %, Europe 37.4% and Latin American 25.5%

Figure 5: Facebook and internet usage comparisons for a selection of Asian countries



Social media penetration in Asia is relatively low. Asia dominates internet users and Europe dominates Facebook users with 223.4 million users compared to Asia in second place at 183.9 million users.

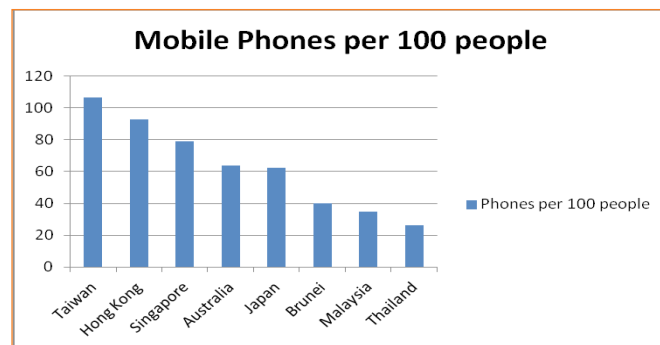
A couple of focus questions create interesting discussion. What would Facebook revenues be like if they tapped the Asian internet penetration? Students clearly pick up the idea there is a captive market in Asia and the way to harness this penetration is increasing younger generation's use of mobile devices.

## Mobile usage in the Asian region

In The Next Web (September 2011), the Asia and Pacific markets have the 'highest penetration of mobile phones in the world'. Figure 6 shows the penetration of mobile phone per 100 of the population. What is more interesting is Asian users tend to interact more with their phones and find their phones

more interesting than watching TV compared to those who use mobile phones in Europe and USA. Another interesting statistic is Singapore (61%), Australia (37%) and Hong Kong (35%) had higher smartphone penetration than USA (31 %).

Figure 6: Number of mobile phones per 100 people per country



There are mixed reasons for these statistics. Some argue Japan is spearheading the mobile market penetration followed by South Korea and Singapore (Mobithinking, 2010). Even though, Taiwan, Hong Kong Singapore and Australia have more mobile phones per person (2011), Japan started the process and now other nations are involved.

What is more interesting is the use of mobile phones in the Asia's less developed economies. These nations have large, growing populations with low PC penetration. The use of land lines has declined because of large infrastructure costs

Mobile Phone repair in Bangalore. Source: Wikimedia Commons







Kyoto monk. Source: Wikimedia Commons

and as a result mobile phones have taken off. Mark Pesce, co-author of *The Next Billion Seconds*, contributor to ABC Drum, conference presenter and futurist tells a wonderful story about how fishermen (and women) use their mobile phones to find out which port has the highest price for their product, before bringing their boat back to the preferred port. He also speaks of uber.com and how it has revolutionized the way people make use of limousine services through the use of GPS booking and tracking. The power of the pen is challenged by the power of the mobile phone.

The future of the mobile web in Asia is set to grow for a number of reasons.

- Firstly the population is large.
- Secondly, low PC penetration makes it easier and cost effective, for growth of the mobile market.
- Thirdly, there is demand as mobiles are seen as an enabler as indicated with Mark Pesce's fishing example.
- Fourthly, technological improvements, such as the expanding 3G roll out in Japan.
- Fifthly, people power, such as Kony 2012, as agent of change. This involves: a reciprocal relationship involving mobile phones and the communication of ideas; and the development of sharing, connecting and collaborating over social justice issues and democratic decision making. On the other hand it is worth encouraging students to do a critical investigation of people power. For example, there have been questions raised about the distribution of funds by the charity group linked to Kony 2012.
- Sixthly, mobile phones enable exposure to branded products aimed to increase sales.
- Lastly, information management through the use of augmented reality.

## CONCLUSION

This ICT Update has integrated knowledge and understanding and the inquiry process, on the internet, mobile phones and social media usage in the context of the recent Geography national curriculum. This type of Geography is current, interesting and relevant and the investigation of statistical data provides discussion about issues students enjoy studying. Moreover, the dominance of data in statistical format provides an opportunity to engage students in critical thinking and the development of geographical skills.

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In 2011 845 million people logged onto Facebook monthly.

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