the *Generation* game

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the timeline ...

2005: what is a **generation**?

2001: digital **natives**, digital **immigrants** ...

2007: in their **own words** ...

2007: student **expectations** study ...

2008: great **expectations** report ...

2008: the **google** generation ...

2009: **becoming** digital literate ...

now: the **generation** game ...

now: any **questions**?
what is a generation?

“In addition to coincidence of birth, a generation is also defined by common tastes, attitudes, and experience...Those times encompass a myriad of circumstances – economic, social, sociological, and, of course, demographic.”

### some generalisations ...

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<td>Extended Family</td>
<td>Nuclear Family</td>
<td>Individual</td>
<td>Online Communities</td>
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**Source:** Oblinger, D.G., & Oblinger, J.L. (2005). [Educating the Net Generation](https://www.oberlin.edu/education/).
meet Marc
Marc is an internationally acclaimed thought leader, speaker, writer, consultant, and game designer in the critical areas of education and learning. He is the founder and CEO of Games2train, a game-based learning company. He holds an MBA from Harvard and a Masters in Teaching from Yale.

Source: www.marcprensky.com
### the digital divide ...

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<th>Birth Dates</th>
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<th>Baby Boomers</th>
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enter the Digital Natives ...
have grown up and surrounded by digital technologies ...

ubiquitous digital environment has resulted in thinking and processing information differently ...

suggests that their brains have physically changed ...

... native speakers of a digital language have parallel processing & multi-tasking abilities ...

have hypertext minds ...

zero tolerance for step-by-step instruction ...

prefer visual information ...

the digital language ...

“Today's teenagers live and breathe the wired world of the internet ... They dig MoSoSo, Moos and MySpace. They can Google, Bebo, Skype, blog or podcast - frequently all at once. They log on to the internet daily, sometimes hourly, seeking anything from entertainment to therapy. For teenagers, the internet is not just an information tool or a way to send emails. It has become a creative and dynamic social force.”

Source: Atkins, L. (2007). Can u speak teenager? The Telegraph. 24.03.07
exit the
Digital Immigrants ...
have **sequential processing & linear abilities** …

don’t **understand** the **new ways** in which the Digital Native **learns** …

… **speaks** with an outdated **language**

**speak** with an “accent”…

**teaching** should **not** be fun …

**prefer** step-by-step instruction …

**prefer** **textual** information …

the digital continuum ...

digital native  digital colonist  digital refugee
digital savage  digital settler  digital dissident
digital pioneer  digital explorer  digital immigrant
under investigation ...
a basis for research?

“Why suddenly is there greater demand for [the] drug [Ritalin] for attentional problems? This might, and I stress might, be something to do with the increased exposure of young children to unsupervised and lengthy hours in front of a [computer] screen ... they get used to and their brains get used to rapid responses.”

what the **papers** say ...

**Man or mouse: the danger of the computer’s memory**

*Roger Boyes: Commentary*

Our Latin teacher, Captain Hogarth, a psychologically sophisticated veteran of some great, distant battle, would whisk us over to the domes of St Paul’s with his leather-bound swagger stick if we so much as blushed. “Silent loco nullitate,” he would bellow – not no work. Yes, those were the days. How much black energy it took to pump into drilling us – quick 93 times 82 – with the aim of imprinting, perhaps, of sharpening our reflexes, training us to obey or at least to contain. Content was not as unimportant as speed of recall, the ability to recite under pressure. That is the way wars were won and lost. And that author Don Tapscott is to be believed, empires lost.

We were aware at the time that rote learning had only limited value in the outside world. Even the football sage Bill Shankly had something to say about the measure of it. “Me havin’ no education, I had to use my brain.” But after leaving school the brighter pupils burst into a creative flower while the thicker nonetheless had a toddlerish problem of multiplying in their head, recite verbatim, understand chemical formulas, spell, sometimes play music by ear – which stayed with them for a lifetime.

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**Stoooopid … why the God of Google isn’t as smart as it thinks**

*The digital age is destroying us by ruining our brains*

*By Bryan Appleyard*

On Wednesday I received 72 e-mails, not counting junk. That was two text messages. It was a quiet day but, then again, I’m including the telephone calls. I’m also not including the day it all went quiet – point zero to Vivato, use a screen, jars – the piously loud telephone conversation of unsocialised adults and the screaming of unamed brats. So why, come to think of it, why not include the junk e-mails? They interrupt. There were 38. Oh and I’d better throw in the 40 news alerts that I receive from all the websites I monitor for my iPhone.

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**Google generation has no need for rote learning**

*Alexandra Frean, Education Editor*

Memorising facts and figures is a waste of time for most schoolchildren because such information is readily available a mere mouse click away, a leading commentator has said.

The existence of Google, Wikipedia and online libraries means that there is no useful place in school for old-fashioned rote learning, according to Don Tapscott, author of the bestselling book *Wikinomics* and a champion of the “net generation”.

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**School Gate blog: Tips for remembering facts**

Memorising facts and figures is a waste of time for most schoolchildren because such information is readily available a mere mouse click away, a leading commentator has said.
a moral panic?

“proponents arguing that education must change dramatically to cater for the needs of these digital natives have sparked an academic form of ‘moral panic’ using extreme arguments that have lacked empirical evidence.”

In Their Own Words
Exploring the learner’s perspective on e-learning
about the report ...

A **two phased** study ...

looking at the **learner experiences of e-learning** ...

synthesises the **LEX project** report and

**learner voice** video case studies ...

captures e-learning **experiences** across a **wide range of age groups** (16 to 65+), **sectors** (HE, FE, ACL & WBL) and

courses (economics, languages, medicine & computing) ...

data capture consisted of **face-to-face interviews, focus groups, digital artefacts** (e.g. blog or e-portfolio) ...

**Source:** JISC. (2007). *In Their Own Words.* HEFCE
lead complex lives, requires sophisticated time management skills ...

boundaries between learning and life is becoming blurred ...

control & choice important – personalise learning environment with technologies (mobile phones, laptops, PDAs, iPods) that support learning and are meaningful to learner ...

want tutors to be fully engaged with e-learning ...

effective e-learners: flexible, resourceful, self aware & highly motivated ...

search engines preferred to libraries ...

use standard software to create, manipulate & present content ...

peer support provided by family & friends using e-mail, texting, instant messaging & Skype – providing an “underworld” of communication & info-sharing invisible to tutors ...

Source: JISC. (2007). In Their Own Words. HEFCE
Student Expectations Study
about the study ...

small study made of interviews (n=27) and online survey (n=501)

15 – 18 years of age ...

varying ICT abilities ...

mixture of school / sixth form & further education students ...

expectations of ICT provision in University ...

Source: Ipsos MORI. (2007). Student Expectations Study. JISC.
generally **technologically adept** and **integrated** it into lives ...

cautious about publishing work for **public scrutiny** ...

**not interested** in technology for “own sake”, only as a means to an end ...

**face-to-face** interaction with a lecturer is a “back bone” to learning ...

**suspects** that learning mediated through technology could **diminish** the **value** of learning ...

unable to make the **connection** on how technology can help them **learn** ...

Source: Ipsos MORI. (2007). Student Expectations Study, JISC.
Great Expectations of ICT
how Higher Education Institutions are measuring up

Research Study Conducted for the Joint Information Systems Committee (JISC) - Report June 2008
about the study ...

follow up of student expectations study ...

online survey (n=1111: cohort=112; booster=999)

17 – 19 years of age ...

respondents are already receptive to technology ...

cohort group perceived to be more technologically fluent than booster group ...

cohort group invited to online focus group ...

Source: Ipsos MORI. (2008). Great Expectations of ICT. JISC.
HEI’s are perceived as providing a good basic level of ICT ...

student expectations are met, sometimes exceeded ...

certain technologies (e.g. online quizzes) can appear familiar and hence comfortable for new students to use ...

students who set up their own collaborative learning mechanism are more engaged with it than when tutors set them up ...

students don’t perceive HEIs are leading the way in developing new methods of learning that will encourage them to think differently about information, research and presentation ...

emerging evidence that student-driven ICT, e.g. Web 2.0, is very beneficial in their learning ...

69% of students believe they critically evaluate internet sources used for research ...

Source: Ipsos MORI. (2008). Great Expectations of ICT. JISC.
challenges for HEIs introducing **ICT** ...

Source: Ipsos MORI. (2008). Great Expectations of ICT. JISC.
information behaviour of
the researcher of the future
11 January 2008
who are the google generation?

“... a phrase that refers to a generation of young people, born after 1993, that is growing up in a world dominated by the internet; whose first port of call for knowledge is the internet and a search engine, Google being the most popular.”

... unlike earlier generations who “gained their knowledge through books and conventional libraries”.

about the report ...

commissioned by JISC & British Library ...

examines how researchers of the future will access & interact with digital resources, i.e. information seeking behaviour ...

"virtual" longitudinal study ...

critical review of published researched over the past 30 years ...

deep log analysis of two live systems aimed at a range of age groups ...

older users catching up fast with technology usage ...

parallel processing may be well developed, but what about sequential processing abilities? (i.e. reading)

prefer visual information over text, but text is still important ...

all generations have “zero tolerance” for information delays ...

internet usage – determined by individual / personality / background NOT generation ...

value authority figures over the Internet for information ...

more people are doing quick, shallow searches, i.e. “power browsing” ...

what is digital literacy?

“the ability to use digital technology, communication tools or networks to locate, evaluate, use and create information.”


developing **digital literacy** skills ...

- trust
- risk
- evaluation
- identity
- understanding textual, visual, auditory & kinaesthetic **information**
- copyright
- authorship
- communication
- accountability
- ethics
- technology
- confidence
- accountability
- responsibility
- adaptability
- reflection
- privacy
- criticality
becoming e-literate ...

“if you think about learner experiences across the curriculum through the life path, as something learners have to understand and make sense of themselves and of empowering learners to be effective, then we start to think about digital literacies ... This really is the area that ... institutions and anyone interested in learning needs to be thinking about.”

Giving children and young people the skills and tools that they need to participate in Digital Britain is of critical importance from both a social and economic perspective. If we are to truly maximise the potential of these digital economy and the benefits it can bring to all sections of society, we must ensure that children and young people are confident and empowered to access, use and create digital media.

concluding thoughts ...

terms like “digital native” and “digital immigrant” are neither useful nor appropriate – just reinforces the stereotype ...

“digital efficacy” is determined by individual / personality / background / opportunity factors ... not a generation!

parents, teachers, governments could do more to understand the digital world that our children live in and influence the way they interact with it to build a better digital future – through digital literacy ...

rigorous research is needed to understand how today’s student learn and how learning is being enhanced with technology – studies need to show students from all spectrums of the learning continuum ...
let’s play, the generation game ...
what’s your generation?

0 – 1 pnts  Silent Generation
2 – 6 pnts  Baby Boomers
6 – 12 pnts Generation X
12 or over Net Generation

any questions