

教育講座系列(十五)

# 與數碼新一代同行

香港大學梁銓琚樓2樓202室  
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# 與數碼新一代同行

數碼科技為我們的日常生活帶來多方面的變化，它不但**塑造和重新塑造**了新的情景，並向年輕一代帶來**挑戰**。是次研討會旨在揭示在「隨時為人提供服務」的數碼環境中成長的含意，並探討如何在不斷變化的世界中，與數碼新一代溝通、互動和同行。



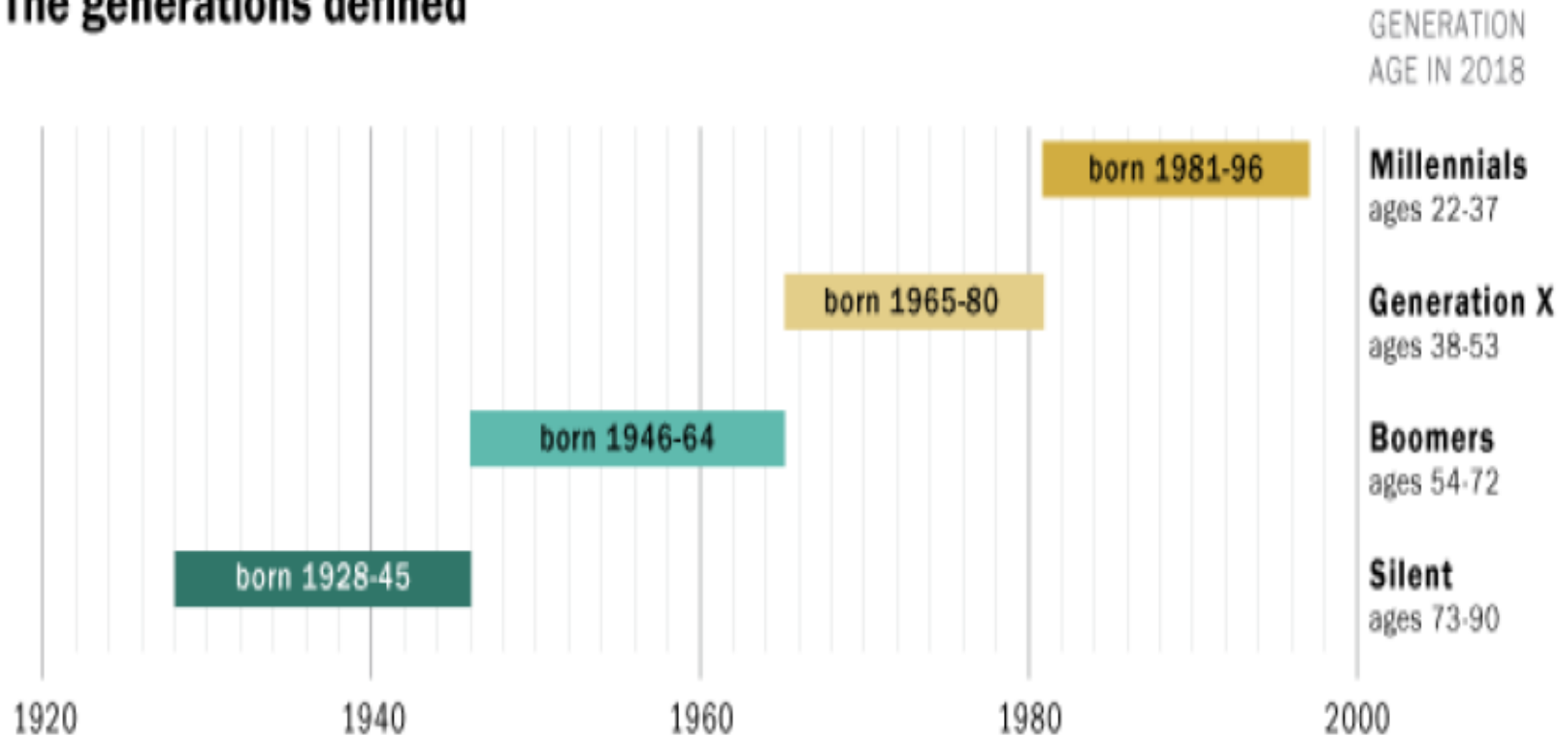
understand

attitude

positioning

The term “**Generation X**” has been used at various times throughout history to describe **alienated youth**.

## The generations defined



PEW RESEARCH CENTER



## 數碼新一代

如何改善子女「機不離手」的習慣？

年輕一代使用數碼產品是否弊多於利？

如何陪伴數碼新一代探索網絡世界？









UNDERWOOD STANDARD PORTABLE TYPEWRITER  
STANDARD FOUR BANK KEYBOARD



*2006 Time's  
Person of the  
Year: You*





# The Rise of Digital Generation

- ❑ Drawing on the sociology of generations (Mannheim, 1952), people's **formative experiences** with media are assumed to shape generations.
- ❑ Generations have often been presented to have relatively **homogeneous patterns** of media (digital technology) use.
- ❑ The contemporary young constitute a generation with a **strong digital orientation**.
- ❑ Young people are seen to be in a specific life phase, **possibly constituting a generation**, and are most likely to exhibit **heterogeneous** media (digital) lives.

# Digital Natives

- Prensky (2006) discusses that digital **natives** have grown up with digital technology, whereas digital **immigrants** were introduced to digital media later in their lives.



# N-Generation

(Tapscott, 1998, 2008; Tapscott & Williams, 2006)

- The active and interactive media use of the net generation was presented as leading to increased **intelligence**, whereas the passive media use of the television generation was seen as stimulating **dumbness**.
- The N-Generators as **Prosumers**
- “We trust **peer-to-peer opinion and social networks**”
- N-Gen **norms** – speed, freedom, openness, innovation, mobility, authenticity, and playfulness
- “If each of us has our **own area of authority** we can collaborate together in multidisciplinary teams for better results”



**“Once I learn how to use Google, isn’t that all the education I really need?”**



# Patterns of Digital Youth Culture

- ❑ Complete integration into **daily life**
- ❑ Control on **forging contacts and relationships**
- ❑ Priority of **self-presentation**
- ❑ Priority of **self-disclosure**
- ❑ **Sharing** information and other things
- ❑ Creation of **user-generated content**
- ❑ **Participatory** media culture

Van Dijk, J. (2012). *The Network Society*, 3<sup>rd</sup> Ed., London: Sage.

# The Information-Age Mindset

- ❑ Computers aren't technology
- ❑ The Internet is better than TV
- ❑ **Reality is no longer real**
- ❑ **Doing is more important than knowing**
- ❑ **Learning more closely resembles Nintendo than logic**
- ❑ Multitasking is a way of life
- ❑ Typing is preferred to handwriting
- ❑ **Staying connected is essential**
- ❑ There is zero tolerance for delays
- ❑ Consumer and creator are blurring

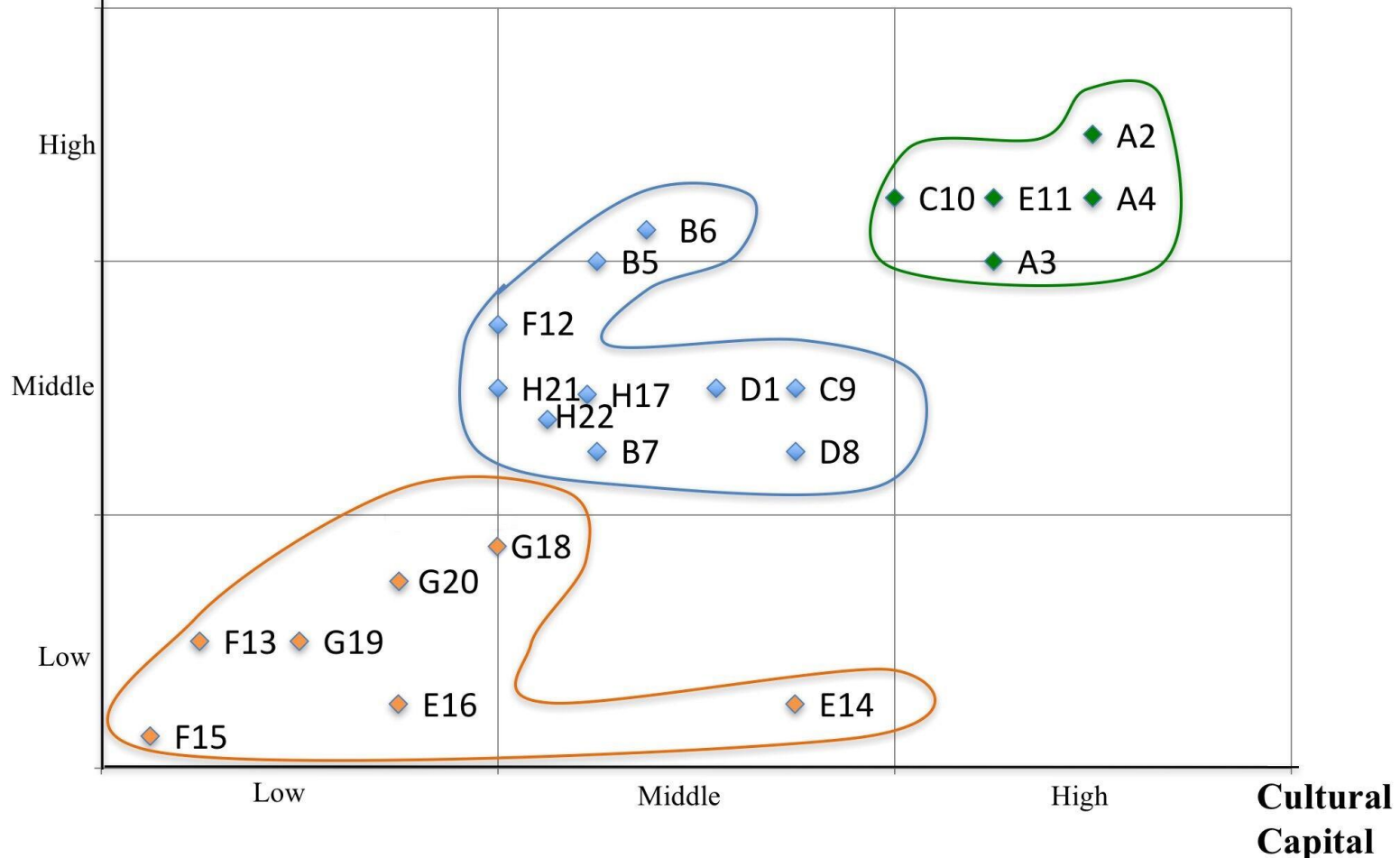
Jason L. Frand. (2000) "The Information-Age Mindset: Changes in Students and Implications for Higher Education." *Educause Review* 35(5): 15-24.

# Attributes of Next Generation Learning from a Student's Point of View (Calkins & Vogt, 2013)

- ❑ **Personalized** to my needs and learning goals
- ❑ **Flexible** so that I can try different ways to learn
- ❑ **Interactive and engaging** to draw me in
- ❑ **Relevant** to the life I'd like to lead
- ❑ **Paced by my own progress** measured against goals I understand
- ❑ **Constantly informed** by different ways of demonstrating and measuring my progress
- ❑ **Collaborative** with faculty, peers, and others, unlimited by proximity
- ❑ **Responsive and supportive** when I need extra help
- ❑ **Challenging but achievable**, with opportunities to become an expert in an area of interest
- ❑ **Available** to me as much as it is to every other student

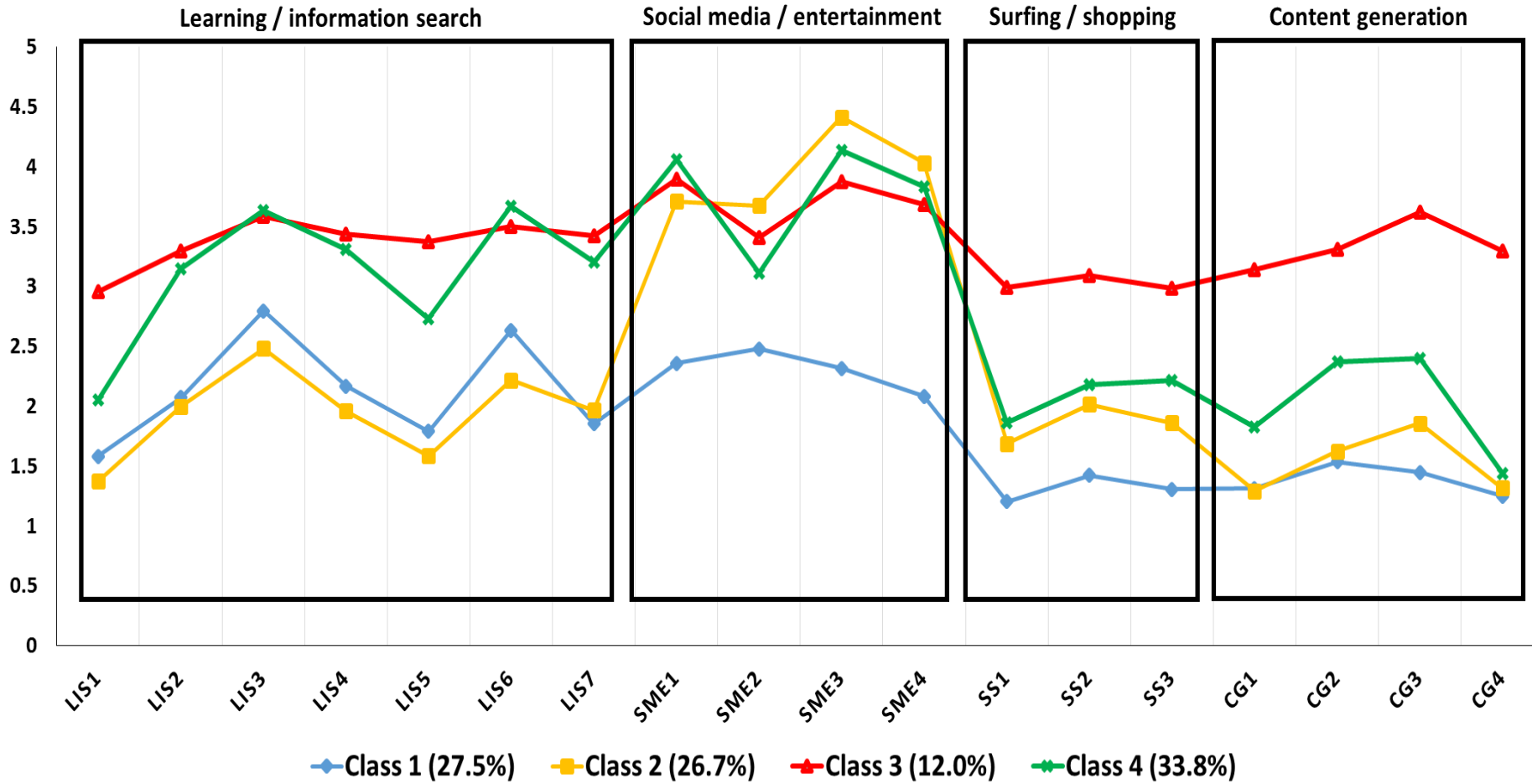
# Digital Youth in Hong Kong: Celebrating users, Coping users, and Struggling users

Parental  
Mediation



Yuen, A.H.K. Park, J. Chen, L. & Cheng, M. (2018). The significance of cultural capital and parental mediation for digital inequity, *New Media & Society*, 20(2), pp. 599-617.

## ICT PATTERNS - FOUR PROFILES



# Latent Profiles (Chan & Yuen, 2018)

1,182 S1/S2 students from 25 **Hong Kong** secondary schools

<b>Class 1</b> <b>(27.5%)</b>	<b>Low-engagement</b>	low ICT usage in all ICT activities
<b>Class 2</b> <b>(26.7%)</b>	<b>Entertainment-oriented</b>	highly engaged in social media and entertainment (SME) only
<b>Class 3</b> <b>(12.0%)</b>	<b>High-engagement</b>	versatile pattern of ICT usage
<b>Class 4</b> <b>(33.8%)</b>	<b>Balanced learners</b>	high learning and information search (LIS) and social media and entertainment (SME), less interested in surfing and shopping (SS) and content generation (CG)



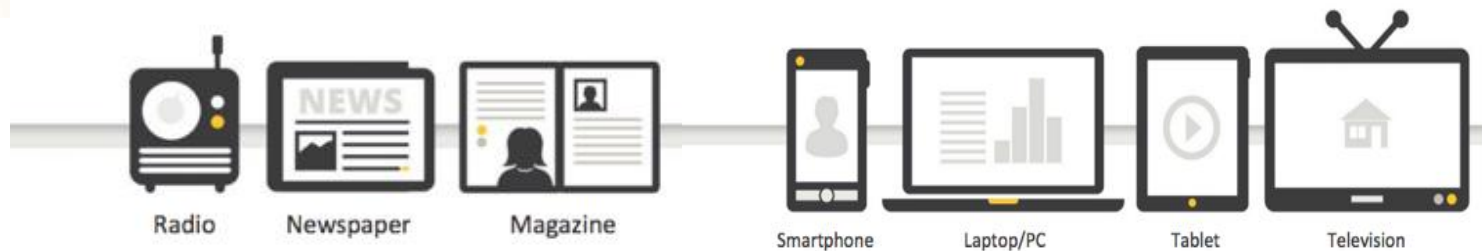
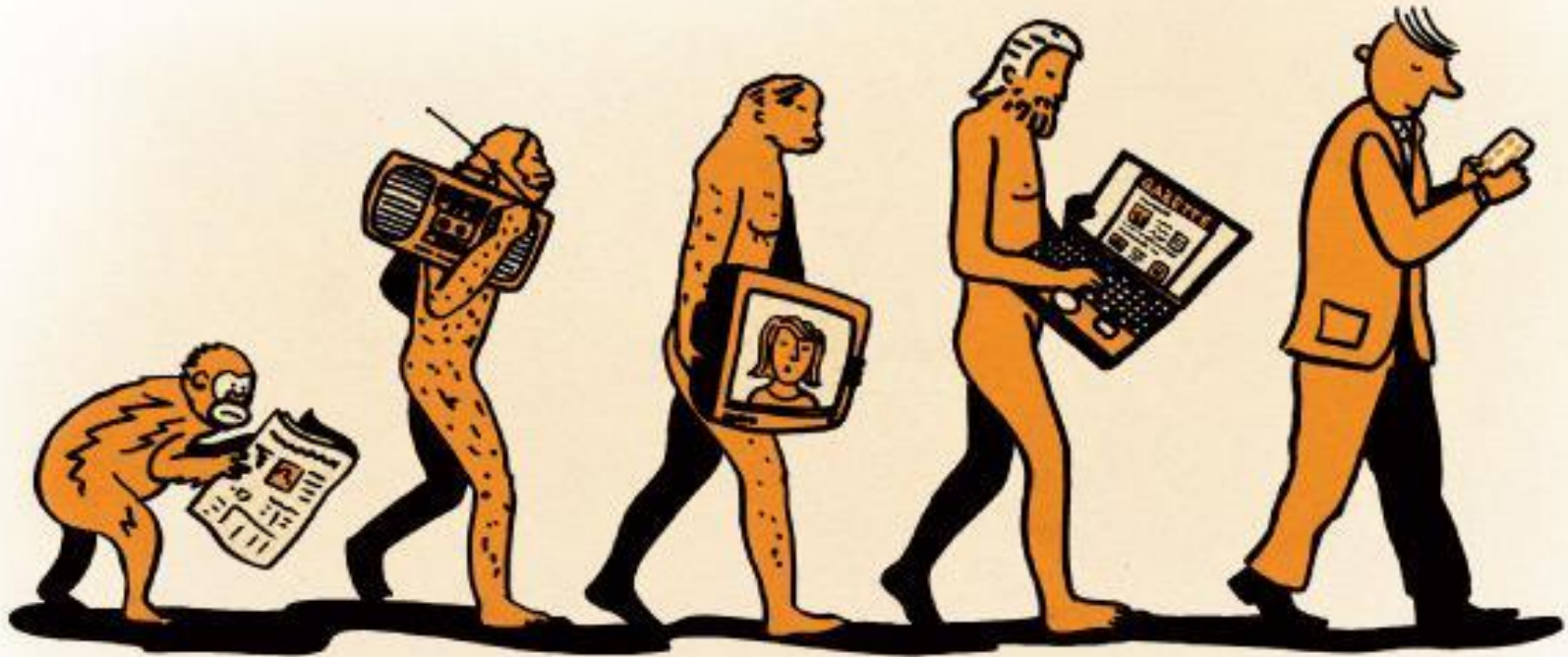
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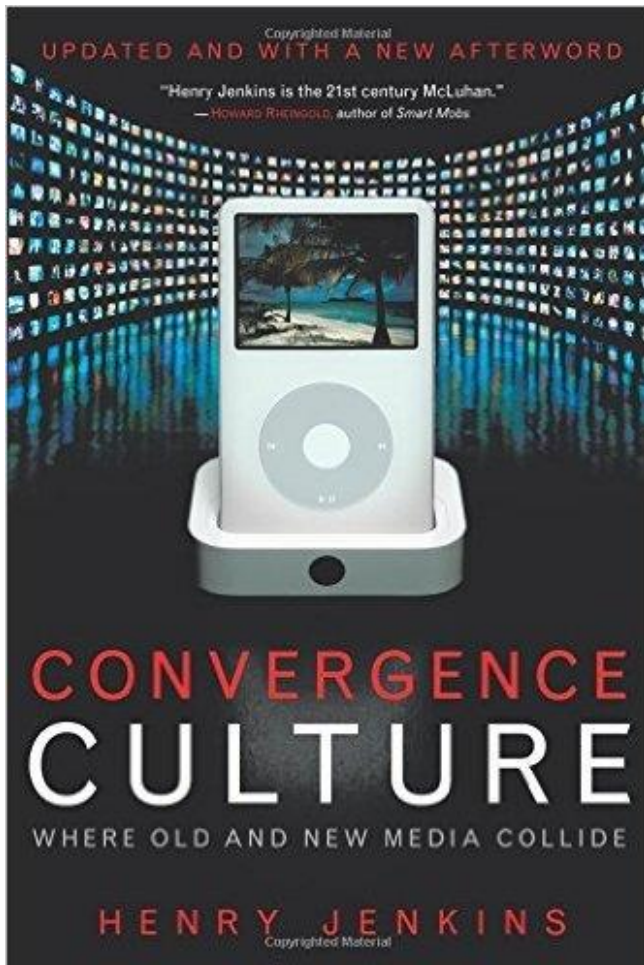
# Old Media and New Media







The age of new media and emerging technologies brings about a **digital ecology**, and shapes **digital practices** and **ways of living**.



“We are entering an era where media will be **everywhere**, and we will use all kinds of media in relation to one another...” Henry Jenkins

The John D. and Catherine T. MacArthur Foundation Reports on  
Digital Media and Learning

## Confronting the Challenges of Participatory Culture

Media Education for the 21st Century

Henry Jenkins

with Ravi Purushotma, Margaret Weigel, Katie Clinton,  
and Alice J. Robison



**MACARTHUR**  
The John D. and Catherine T. MacArthur Foundation

A participatory culture is a culture with [...], strong support for **creating** and **sharing** one's creations ...

A participatory culture is also one in which members believe their **contributions matter**, and feel some degree of **social connection** with one another ...

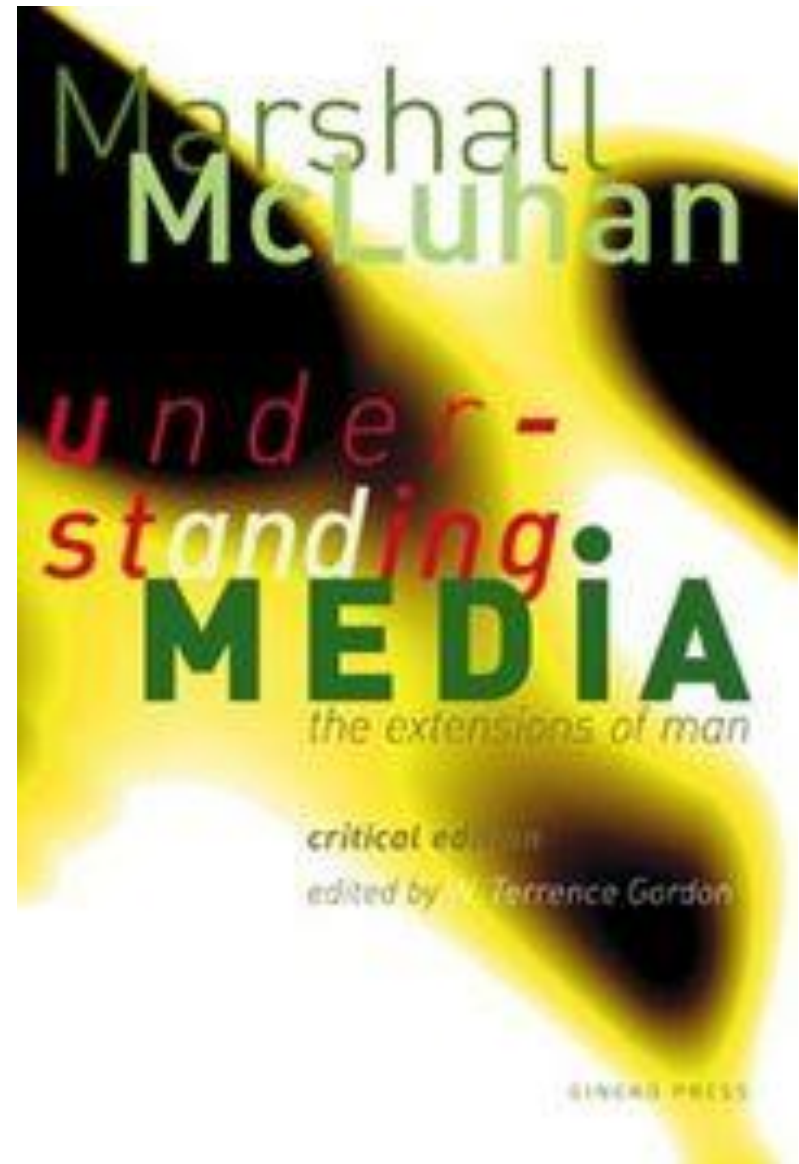


# New Media Literacies

<http://www.newmedialiteracies.org/>



Media have effects in that they continually *shape* and *re-shape* the ways in which individuals, societies, and cultures perceive and understand the world ..... Media would eventually become ‘*extensions of man*’



Herbert Marshall McLuhan (1964)

Meyer, D.E. (2018). (Ed.) *Digital Media and Developing Minds*, Washington, DC: National Academy of Sciences.

[http://onlinedigeditions.com/publication/?i=539459#{"issue\\_id":539459,"page":0}](http://onlinedigeditions.com/publication/?i=539459#{)



## Digital Media and Developing Minds

Edited by David E. Meyer

Arnold and Mabel Beckman Center

Irvine, CA

October 13–16, 2015



**Cover Image:** Pictured are children engrossed in their smartphones. The World Wide Web, social media, smartphones, and related innovations of the postmodern digital information age provide access to information on an unprecedented scale. Articles in the Sackler Colloquium on Digital Media and Developing Minds examine the potential benefits, costs, and risks of ubiquitous digital-media exposure for young people. The articles cover developmental stages ranging from infants to young adults; examine cognitive, behavioral, physiological, emotional, and sociological effects; and draw on approaches in computer science, neurobiology, developmental psychology, cognitive science, and education. Image courtesy of Shutterstock/maybell.

Proceedings of the National Academy of Sciences of the United States of America www.pnas.org

# PNAS

## Digital Media and Developing Minds

The papers collected here result from the Arthur M. Sackler Colloquium of the National Academy of Sciences, *Digital Media and Developing Minds*. Complete information about this colloquium and video recordings of most presentations are available on the NAS website at [www.pnas.org/Digital-Media-and-Developing-Minds](http://www.pnas.org/Digital-Media-and-Developing-Minds).

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### INTRODUCTION

- 0545 **From savannas to blue-phase LCD screens: Prospects and perils for child development in the Post-Modern Digital Information Age**  
David E. Meyer

### COLLOQUIUM PAPERS

- 0551 **How early media exposure may affect cognitive function: A review of results from observations in humans and experiments in mice**  
Dimitri A. Christakis, Julian S. Benedikt Ramirez, Susan M. Ferguson, Shilpa Karmiloff-Smith, and Jan-Marino Ramirez
- 0559 **Two are better than one: Infant language learning from video improves in the presence of peers**  
Sarah Roseberry Lytle, Adrian Garcia-Sierra, and Patricia K. Kuhl
- 0567 **Effect of sequential video shot comprehensibility on attentional synchrony: A comparison of children and adults**  
Heather L. Kitzman and Daniel E. Anderson
- 0575 **Screen media use and ADHD-related behaviors: Four decades of research**  
Ira B. Segal, Peter M. Valkenburg, and Jessica Taylor Piotrowski
- 0582 **Metaanalysis of the relationship between violent video game play and physical aggression over time**  
Anna T. Prescott, James D. Sargent, and Jay D. Hull
- 0589 **Minds and brains of media multitaskers: Current findings and future directions**  
Malina E. Uncapher and Anthony D. Wagner
- 0597 **How to play 20 questions with nature and loss: Reflections on 100 years of brain-training research**  
Benjamin Katz, Priti Shah, and David E. Meyer

Articles in the Sackler Colloquium on *Digital Media and Developing Minds* examine the potential *benefits, costs, and risks* of ubiquitous digital-media exposure for young people. The articles cover **developmental stages** ranging from infants to young adults; examine cognitive, behavioral, physiological, emotional, and sociological **effects**; and draw on **approaches** in computer science, neurobiology, developmental psychology, cognitive science, and education.



The digital technology has brought about many changes in multiple aspects in our everyday life. It has shaped and re-shaped new scenarios and presented **challenges** for the younger generation. Also, the younger generation can make their own contributions, share ideas, explore, investigate, experiment, discuss ..., but they **cannot be left unguided and unsupported**. To get the best from the experience the complexity of “*learning life*” must be “*rich*” enough to match those rich opportunities.







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# 美國精神學會建議診斷 沉迷網絡遊戲病態的標準

- 在一年中，長期地及無間斷地使用互聯網參與網絡遊戲，並有以下五項或以上特徵：
  1. 玩網絡遊戲成為了支配的活動
  2. 不玩網絡遊戲會構成心理上的不安、不愉快，及憂慮
  3. 容讓自己投入網絡遊戲的時間愈來愈長
  4. 曾嘗試控制自己不參與網絡遊戲但失敗

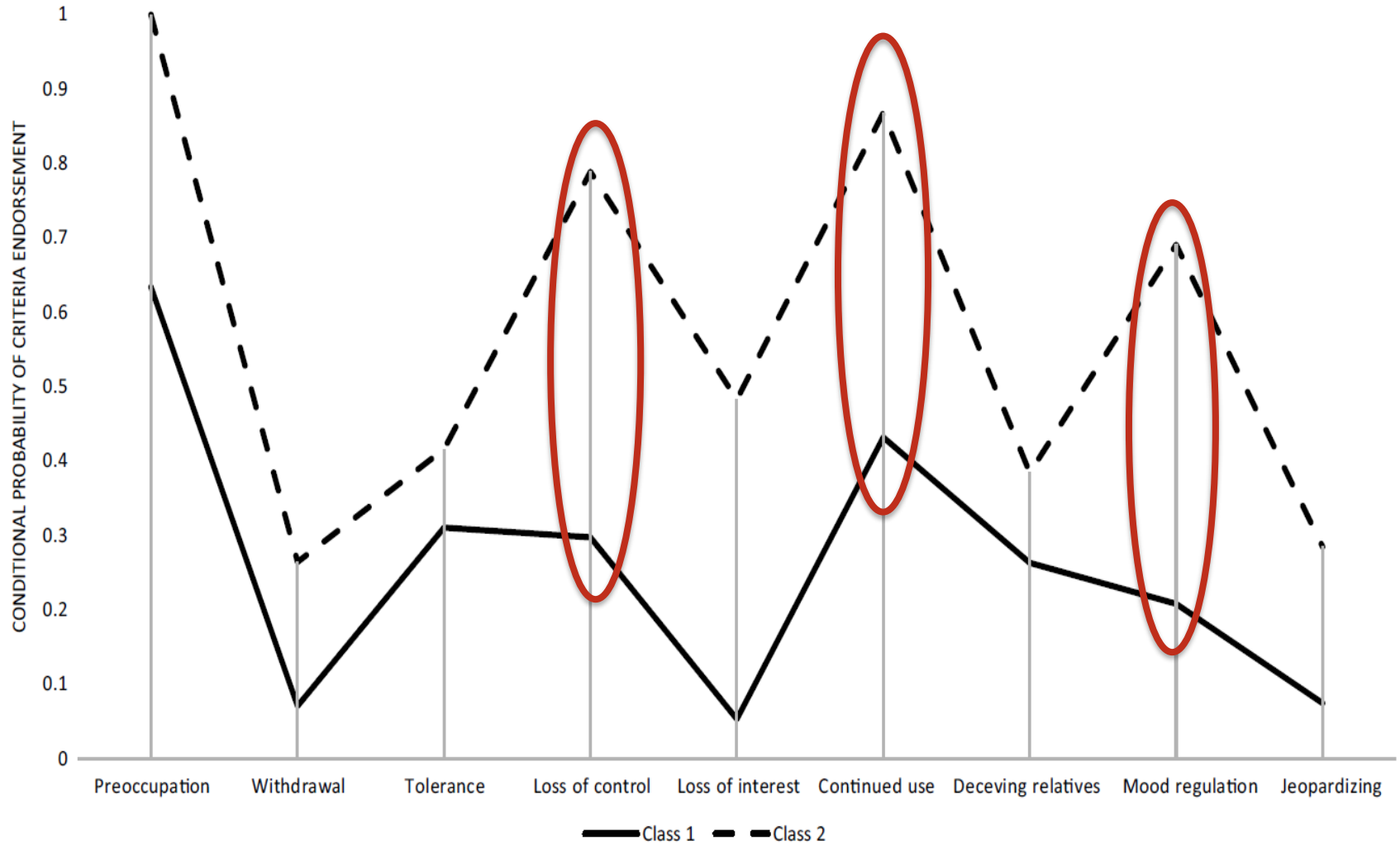
(American Psychiatric Association, 2013, 795)

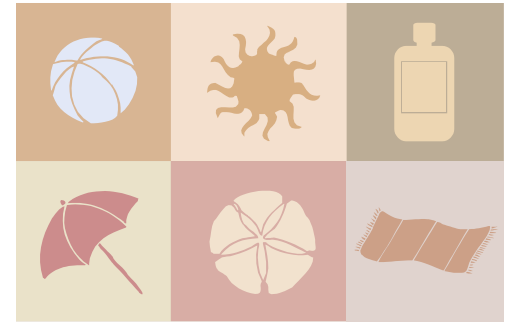
# 美國精神學會建議診斷 沉迷網絡遊戲病態的標準

5. 除了沉迷網絡遊戲外，對原有的嗜好及娛樂失去興趣
6. 即使知道自已的心理及社交問題，仍沉迷網絡遊戲
7. 向別人隱瞞參與網絡遊戲的時間(量)
8. 沉迷網絡遊戲來逃避或舒緩負面情緒
9. 因沉迷網絡遊戲嚴重影響人際關係、學業或工作

# 沉溺網絡遊戲者及健康網絡遊戲者的區分

*Risk factors for Internet gaming disorder*





# Everyday Life

## Tool or Companion

# Psychological Effects of Computational Objects/Tools

- ❑ Unintended side effects of people's tendency to **project thoughts and feelings** onto their machines (1980s)
- ❑ “*Effects by design*” – machines and computational objects are being designed to have **emotional and cognitive effects**, and to serve as companions, pets, and tutors (since 2000)
- ❑ Provide simple salvations; and Apps will tend to our **emotional lapse**



# Encouraging Changes

- ❑ Information technology does not determine change, but it **encourages** us to take certain directions
- ❑ It **encourages** changes in thinking



# Self and Identity Virtual or Authentic



**“Whenever something goes wrong,  
I just push this little button and restart.  
I wish my whole life was like that!”**



**“Whenever my life seems dark  
and I need a sunnier outlook,  
I just turn up the brightness control.”**

# Simulation Culture

- ❑ Compress time and space – to make simulation more **abstract** and **interactive**
- ❑ Simulations and its discontents
- ❑ Artificial life – not alive, but almost alive
- ❑ Simulated self; Second self
- ❑ Cyber-subjectivity and experience with physical limitation

# Identity Technology

- ❑ Online worlds can provide valuable spaces for **identity** play and encourage adolescents to reinvent themselves for each of their proliferating **social roles**
- ❑ Open up a new horizon for **self exploration**
- ❑ Free from “reality”?

# The SIMS 4





# **Interpersonal Relationship**

**Improving or Harming**





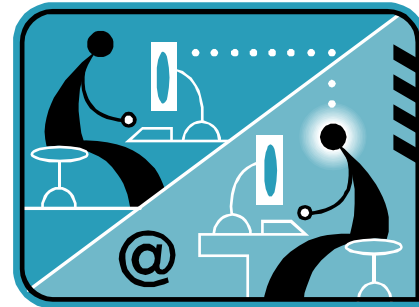
I LOVE My  
Computer  
Because My  
Friends  
Live In It

# Internet Paradox

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet Paradox: a social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.

# Challenges of Cyber Relationship

- Closer in terms of distance but **not the mind**
- Less **family communication** – computer as a Trojan horse
- Smaller social circle
- Always being connected is going to make us less lonely?
- Increase **depression** and **loneliness**
- Does technology make emotions easy?
- Looking to technology to repair the **empathy gap** seems an ironic rejoinder to a problem we perhaps didn't need to have in the first place



# Cyber Communities Illusion or Reality

A technology is not merely a system of machines with certain functions; rather, it is an expression of a social world. [.....]  
No technology exists in isolation.  
Each is an *open-ended set of problems and possibilities.*

Nye, D.E. (2006). *Technology Matters: Questions to Live With*, Cambridge, MA: MIT Press.



# **Re-define thinking, feeling, and acting in such an expression of a social world**

- Community purpose
- Social mechanism in the community
- Career development
- Support
- Commitment
- Trust, Loyalty, Respect
- Friendship, Neighborhood
- Risk
- Violence
- Bullying



# Participation Consumer or Prosumer

# Consuming and Prosuming New Media

- ❑ New media literacy as a **continuum** from media **consuming** to media **prosuming**
- ❑ Consuming media literacy refers to one's ability to **access** media, message and **use** media at various proficiency levels.
- ❑ Prosuming media literacy refers to one's ability to **produce** media content, in addition to consuming skills.
- ❑ A prosumer is both a producer and consumer whose half of production is **for exchange** and half of production is **for self use**.
- ❑ New media prosumption has two aspects: **creating/producing** media content, and **participating** in media uses.

# Becoming a Critical and Responsible Prosumer

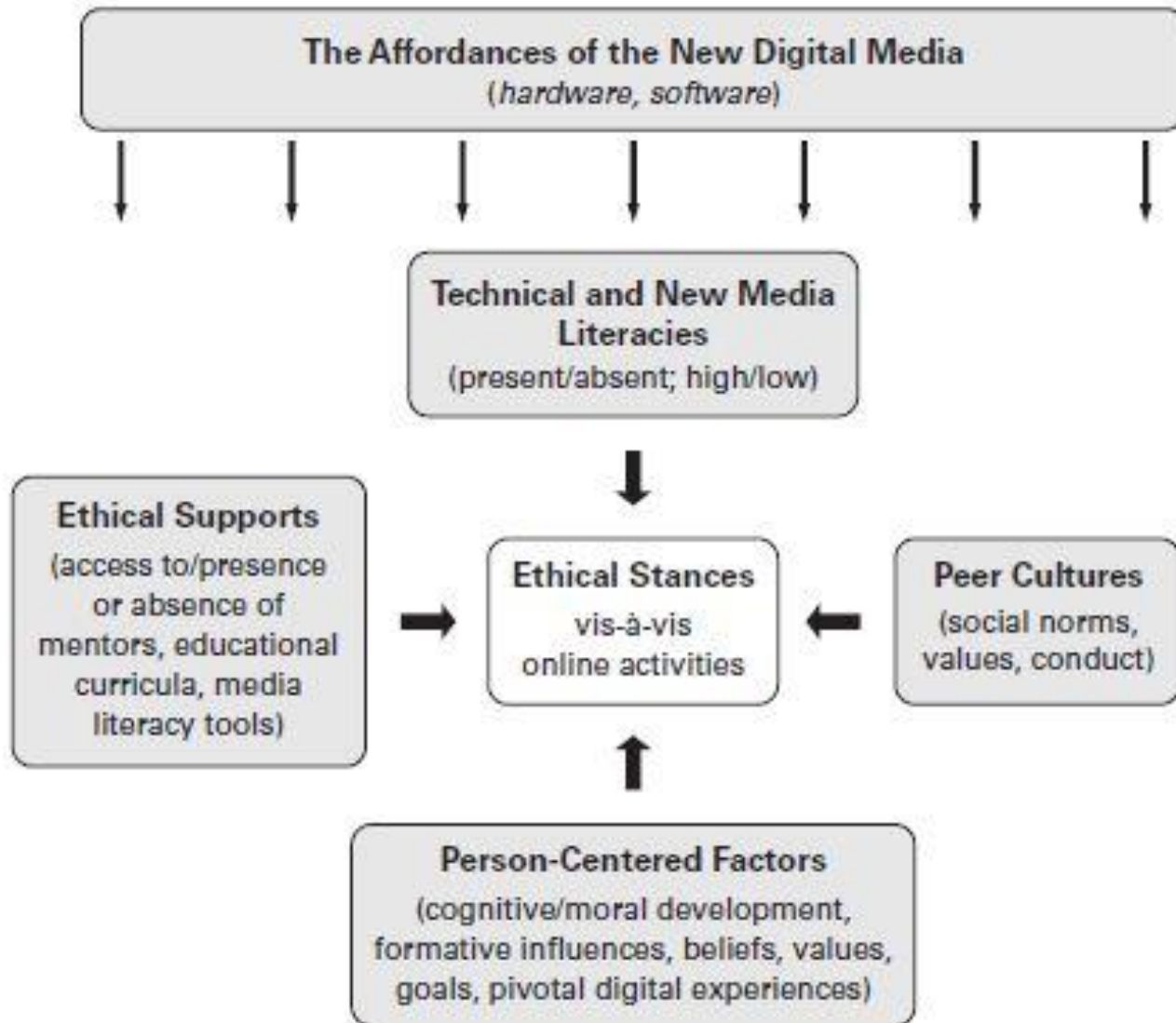
- ❑ Becoming a critical and responsible prosumer is a **prerequisite** for **effective participation** in the 21<sup>st</sup> century information society
- ❑ Right/Wrong
- ❑ Good/Bad
- ❑ Appropriate/Inappropriate

*Young People, Ethics, and the New Digital Media*  
The MIT Press, 2009

The authors propose a model of ‘**good play**’ (ethical play) that involves:

- ❑ the **unique affordances** of the new digital media;
- ❑ related technical and new media **literacies**;
- ❑ cognitive and **moral** development and values;
- ❑ online and offline **peer culture**; and
- ❑ ethical **supports**, including the absence or presence of adult mentors and relevant educational curricula.





## *Young People, Ethics, and the New Digital Media*

<https://mitpress.mit.edu/books/young-people-ethics-and-new-digital-media>

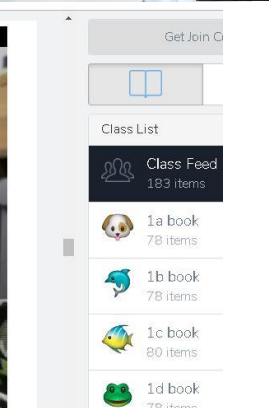








E(11) LAM Alex, Who Would Win? Killer Whale vs. Great White Shark



emily  
March 19, 2011 at 5:33 am

HKG student

emily... that really is uncomfortable, but can we let it be the first step of the start??

Reply

claudia3330  
March 22, 2011 at 1:19 pm

BCN student

It is a good idea to use this invention in the stairs not only in the first step but in all of them, for example in the stairs of the school, or in the most crowded metro stations' stairs, airport etc...

Reply

claudia9330  
March 29, 2011 at 11:23 pm

BCN student

Here are the links for the Speed Bump: [http://www.previous\\_view=mscd...](http://www.previous_view=mscd...)  
Stairs: <http://www.shop...>

Reply

mariacm98  
March 22, 2011 at 1:34 pm

BCN student

I like your group's invention, I think to make it more comfortable for cars it can be used as a speed bump, so it will help cars to reduce the speed in the city and therefore pollution

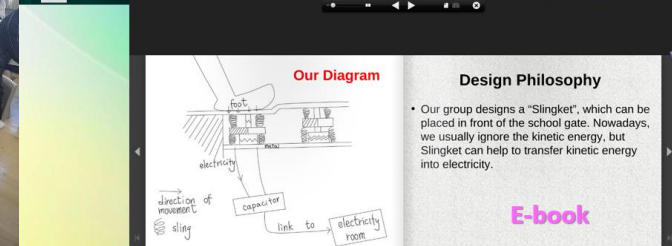
Reply

CK  
April 8, 2011 at 11:23 pm

HKG student

Can we solve the problem mentioned above by make the machine lighter so that students do not feel they are dropping down?

Reply



25 build-ons,  
Expert talk,  
Group inquiry





# Project 365



## 生命教育及成長課

「自拍」看人生，  
喜樂在我心

在每天忙碌的生活中，我們往往忽略了身邊的人與事 (a mindless life)，甚至忽略了自己內心的感受及對個人生命的了解 (a soulless life)。

課堂把「自我拍攝」的概念融入「正向教育」的理念，讓同學學習製作拍攝日誌，用心觀察生活中的人與事，並對自己的感受及生命成長有更深的認識和了解。盼望透過此課堂，讓同學和家長一同在「自拍」中建立正面關係，並學習享受充滿正面情緒、能全情投入、有意義、及有滿足感的喜樂人生。





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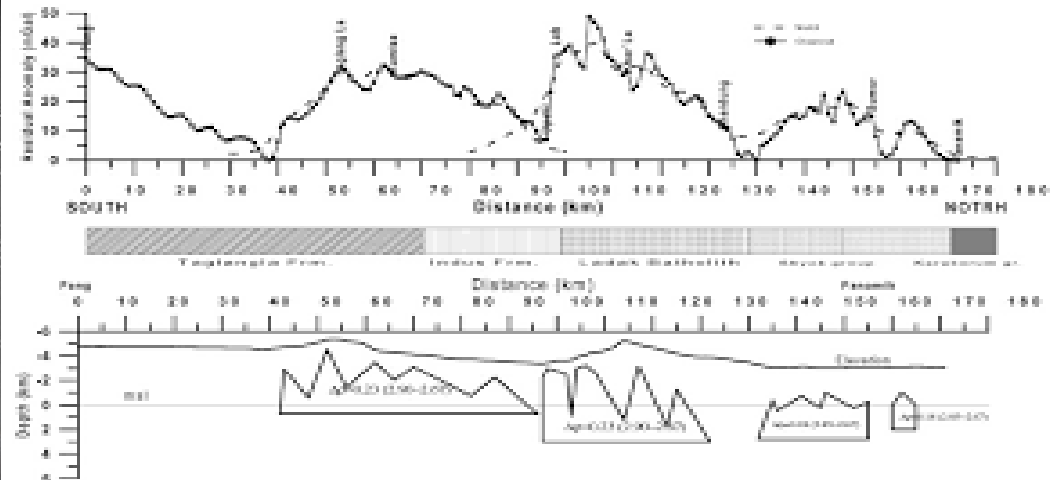


**如何陪伴數碼新一代探索網絡世界？**

- ❑ Make yourself **available**
- ❑ Support and foster **community** and **relationship** building
- ❑ Stimulate students/children to actively engage in activities and effectively **participate** in sharing **responsibilities** and **power**.



- ❑ Make students/children sense that they are constructing their interpretations and there is an ample space for negotiations in **co-construction** of understanding
- ❑ Develop and facilitate students/children to be capable of **forming** their ideas and opinions based on their analysis and evaluation the **big picture** of .....
- ❑ Offer **ownership** and give them the **stage**





Information technology embedded in “a **culture** that supports **democracy, freedom of expression, tolerance, diversity,** and **complexity of opinion** is one of the next decade’s greatest challenges. We cannot afford to fail”

Turkle, S. (2005). *The Second Self: Computers and the Human Spirit*, MA: The MIT Press.

“... And **conversation** advances self-reflection, the conversations with ourselves that are the **cornerstone** of early development and continue throughout life ...”

Turkle, S. (2015). *Reclaiming Conversation: The Power of Talk in a Digital Age*, NY: Penguin Press.

# Find Ourselves

- ❑ To re-consider the **too-simple** enthusiasm of “the more connected we are, the better off we are” (Turkle, 2015)
- ❑ Disconnect to connect
- ❑ Technology enchants. It makes us **forget** what we know about life.
- ❑ It is not a moment to reject technology but **to find ourselves**

# Reclaiming Conversation (Turkle, 2015)

- ❑ I'd rather **text** than **talk**. I don't like a certain kind of talk. [...] It takes place in real time and you can't control what you're going to say.
- ❑ What do we forget when we talk to machine, and what can we remember?
- ❑ We forget **what is special about being human**.
- ❑ We forget **what it means to have authentic conversation**.
- ❑ It is NOT just that older people are supposed to be **talking**. Younger people are supposed to be **listening**.





WWW

WORLD WIDE WEB

WWW

WHAT A WONDERFUL WORLD

# What A Wonderful World - Louis Armstrong (1967)



I hear babies **cry**, I watch them **grow**.

**They'll learn much more than I'll never know.**

And I think to myself what a wonderful world.

Yes, I think to myself what a wonderful world.

WWW

WHOSE WONDERFUL WORLD

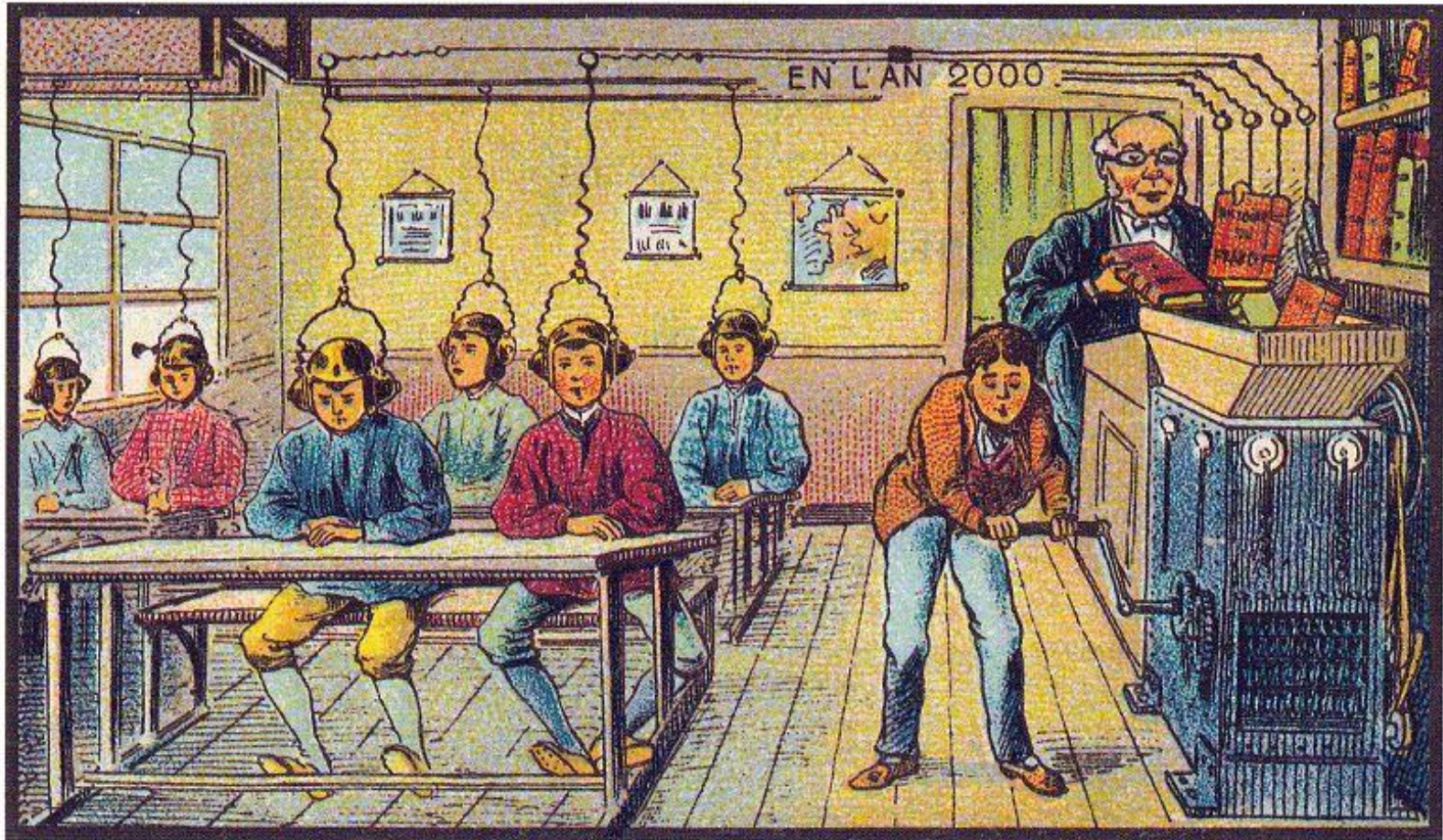
To connect and nurture the digital generation, we need to:

- ❑ Be humble and open
- ❑ Let go of “I know”
- ❑ Have empathy and imaginations



# Visions of the Year 2000

Jean-Marc Côté (1899), a French commercial artist



At School



## Empty heart of top Chinese college students

2016-11-22 16:21:25 CRIENGLISH.com Web Editor: zhangjin



University freshmen [File photo: northnews.cn]

According to a psychological counselor with Peking University, over 30 percent of freshmen in the university hate studying and over 40 percent feel life has no meaning at all. The counselor says many students are suffering from a problem of feeling empty in the heart. Is it true? What is wrong?

*” Education means change - change toward  
the right and desirable direction ..... ”  
Martin Buber (1879-1965)*







**Thank You**

← Backspace

Screen

Page Up

Home

Page Down

"

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Shift

Insert