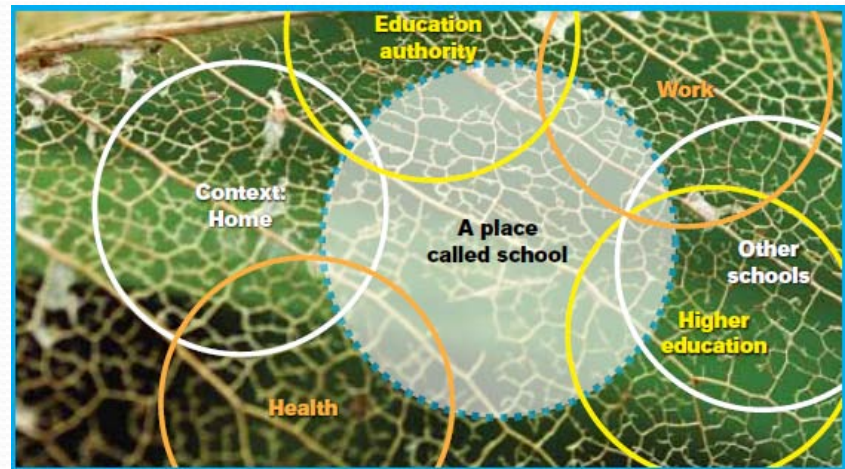


Developing Networked School Communities

Creating a home-school nexus

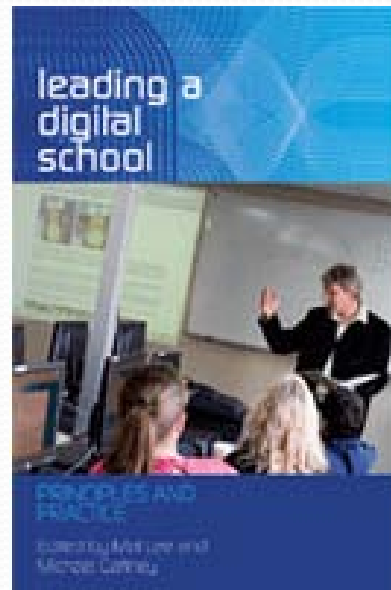
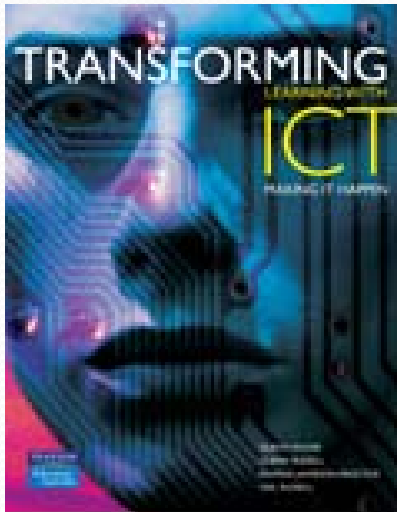


Developing Networked School Communities: Beyond a Digital School

- What does schooling look like? A place called school
- Collectively, policy, research and practice have informed schools to become digital schools – see, for example, *Leading a Digital School* (Lee & Gaffney, 2008)
- *Key question* – what might the next mode of schooling look like? – beyond a digital school?
- *Key message* – vision: networked school communities are the next phase of schooling

Developing Networked School Communities: Beyond a Digital School

- *Key question* – what might the next mode of schooling look like? – beyond a digital school?
- *Key message* – vision: networked school communities are the next phase of schooling



The next
phase –
beyond a
digital school
???

The book...

Developing a Networked School Community

A guide to realising the vision

Developing a Networked School Community: A guide to realising the vision examines the next phase of schooling – the development of networked school communities.

Already, there are pathfinding schools that have moved from the traditional paper-based form to become digital schools. Many of these schools understand the new, rich learning and teaching opportunities which become possible when they 'dismantle the traditional school walls', and use their networks to connect with their homes and the wider community.

This book examines and provides guidance for how your school can realise these potentially immense opportunities. It proposes a model that enables various approaches to build on the current reality, and capitalise upon the growing digital capacity of the home and the largely unharnessed 'teaching' capacity of the parents. It encourages the creation of a strengthened home-school nexus that can build collaboration and markedly improve student attainment.

The book explores a future model of schooling that integrates the 'teaching' of the parents, and the burgeoning digital skills of the young, with schools that make astute use of their digital technology in a highly collaborative and networked manner. It provides guidance for how your school can begin working with students' homes and commence the shift to the networked mode immediately.

Developing a Networked School Community is intended for anyone interested in improving the quality, relevance and effectiveness of schools. This includes parents, students, politicians and the wider community, as well as principals, teachers and other education professionals. The reader will envision the teaching and learning opportunities enabled by a very different and exciting networked mode of schooling, which the authors believe will provide significant outcomes for anyone interested in educating young people to successfully participate in their digital futures.

Mal Lee is an educational consultant specialising in the development of digital technology in schools. He is a former director of schools and secondary school principal, who has written extensively on the effective use of ICT in teaching practice. He is co-author of *Leading a Digital School*, *The Use of Instructional Technology in Schools*, and *The Interactive Whiteboard Revolution*, published by ACER Press.

Associate Professor Glenn Finger is Deputy Dean (Learning and Teaching), Faculty of Education at Griffith University. Previously he served with Education Queensland for over 24 years in a wide variety of teaching and school leadership positions. He has particular expertise in ICT and Technology Education initiatives, research and evaluation.

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Australian Council for Educational Research

ACER



Developing a Networked School Community

Edited by Mal Lee and Glenn Finger

Developing a Networked School Community

A guide to realising the vision

Edited by Mal Lee and Glenn Finger



Defining Networked School Communities

- a networked school community is defined as:
“a legally recognised school that takes advantage of the digital and network technology, and a more collaborative, networked and inclusive operational mode to involve its wider community in the provision of a quality education appropriate for the digital future” (Lee & Finger, 2010, p. 46).









Some Context 1980-2010

- 1981 – 160 schools in Queensland had a total of 310 computers
- 1982 - 228 schools had 643 computers
- 1983 – Policy – *Computers in the Curriculum* (Department of Education, Queensland)
- 420 schools had 1550 computers
- 1984-1986 Triennium – Qld Government received \$2 million – for Secondary Schools as part of the Commonwealth Government's *Computer Education Program*
- 1986 - \$500 subsidy was made available for each school to purchase computer hardware
- 1986-1987 – Lee Shulman: Pedagogical content knowledge (PCK)

Some Context 1980-2010

















- 1991 – 1993 Queensland Sunrise Centre – 1:1 computing 120 Year 6,7 & 8 students with 120 laptops – the DER 20 years ago?
- 1995 - 28491 computers in Qld preschools, SDEs, Spec Ed, Primary and Secondary Schools
- 1997 – Vision: Schooling 2001 – Minimum Standards
- 1998 – Google
- 2000 3 year Learning with ICT Strategy – ICT Strategic Plans in schools
- 2005 Smart Classrooms Professional Development Framework – digital pedagogies journeying
- 2006 - TPACK conceptualised (Mishra & Koehler)
- 2010 – DER, AICTEC (esp. TDAAG), AITSL (esp. National Professional Standards for Teachers), QCT (esp. Professional Standards Committee)
+ TDAAG work plan, ICT Innovation Fund...
+ International research and developments – ISTE, TPACK...
+ Technological/infrastructure developments – NBN?, digital ecosystems...

Some Context 2000-2010: Is PCK adequate?



	2000	2010
daily google searches 	100 million	2 billion
time spent online 	2.7 hrs per week	18 hrs per week
active blogs 	12000	141 million
books published 	282242	1052803
daily emails 	12 billion	247 billion
daily letters mailed 	207.88 billion	175.67 billion
iTunes downloads 	0	10 billion
CD sales revenues 	\$943 million	\$427.9 million

From Heirarchical to Wirearchical











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Find movies, music, stocks, books, and more



Explore and innovate

-  [Code](#)
Developer tools, APIs and resources
-  [Labs](#)
Explore Google's technology playground

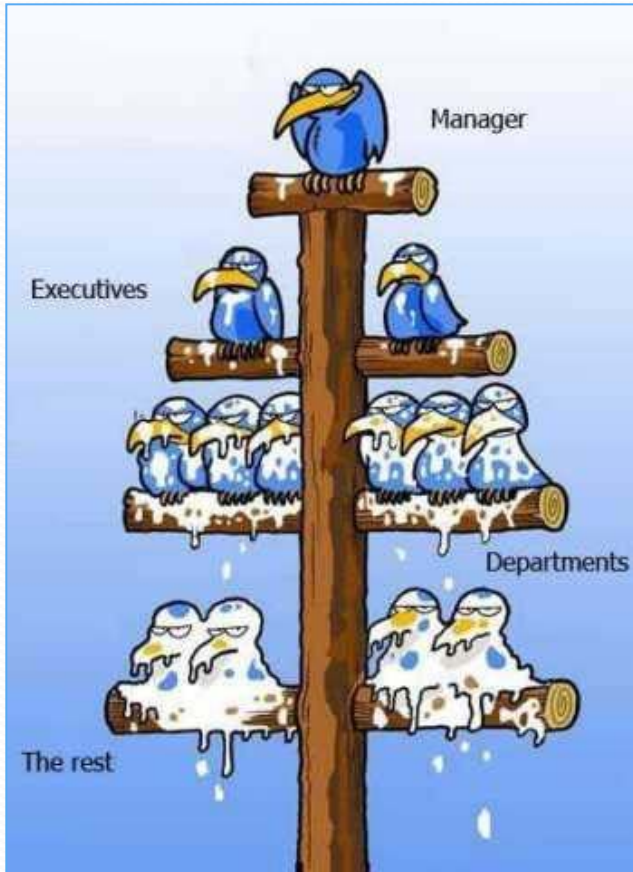
Communicate, show & share

-  [Blogger](#)
Share your life online with a blog – it's fast, easy, and free
-  [Calendar](#)
Organise your schedule and share events with friends
-  [Docs](#)
Create and share your online documents, presentations, and spreadsheets
-  [Gmail](#)
Fast, searchable email with less spam
-  [Groups](#)
Create mailing lists and discussion groups
-  [Picasa](#)
Find, edit and share your photos
-  [SketchUp](#)
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IM and call your friends through your computer
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View web pages in other languages
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Go mobile

-  [Mobile](#)
Get Google products on your mobile phone
-  [Maps for mobile](#)
View maps, your location and get directions on your phone


From Heirarchical to Wirearchical





From Hierarchical to Wirearchical


Experiments


Sorted by date [Sort by popularity](#)


- 


[Google Transliteration](#)
Use Google Transliteration to type phonetically using an English keyboard (updated!).
April 8, 2010 ★★★★★ 531 Ratings [Details and feedback »](#)
- 

[Tashkeel](#)
A tool to add missing diacritics to Arabic text.
March 22, 2010 ★★★★★ 185 Ratings [Details and feedback »](#)
- 

[Sputnik](#)
Runner for the Sputnik JavaScript conformance tests.
March 10, 2010 ★★★★★ 34 Ratings [Details and feedback »](#)
- 








[Google Reader Play](#)
Google Reader Play is a fun, fast way to browse the most interesting items on the web, personalized just for you.
March 10, 2010 ★★★★★ 235 Ratings [Details and feedback »](#)
- 

[Gesture Search](#)
Gesture Search lets you quickly find a contact, an installed application, a bookmark or a music track on your Android phone by drawing alphabet gestures on the touch screen.
March 8, 2010 ★★★★★ 71 Ratings [Details and feedback »](#)
- 


[Public Data Explorer](#)
Rich visual exploration of useful public datasets.
March 8, 2010 ★★★★★ 89 Ratings [Details and feedback »](#)
- 


[Shopper](#)
Find product information quickly with your Android phone.
February 19, 2010 ★★★★★ 44 Ratings [Details and feedback »](#)


Other experiments at Google


- [Calendar Labs](#)
Latest ideas from the Calendar team 
- [Gmail Labs](#)
Dozens of Gmail experiments 
- [Google Code Labs](#)
Experimental developer products 
- [Google Maps Labs](#)
Experimental Maps features 
- [Search Experiments](#)
Alternate search views and more 
- [Toolbar Labs](#) (IE only)
Language and location-based experiments 
- [YouTube TestTube](#)
YouTube's ideas incubator 


Meet the engineers

- 

Andy Hertzfeld
Worked on [Google News Timeline](#). A software wizard, Andy is thinking about new ways to search for news.
- 

Artem Boytsov
Worked on [Google Trends](#). When he's not setting trends, Artem is finding them in Google searches.
- 

Henry Rowley
Worked on [Image Swirl](#). When not building Flash UIs, Henry does computer vision research.
- 

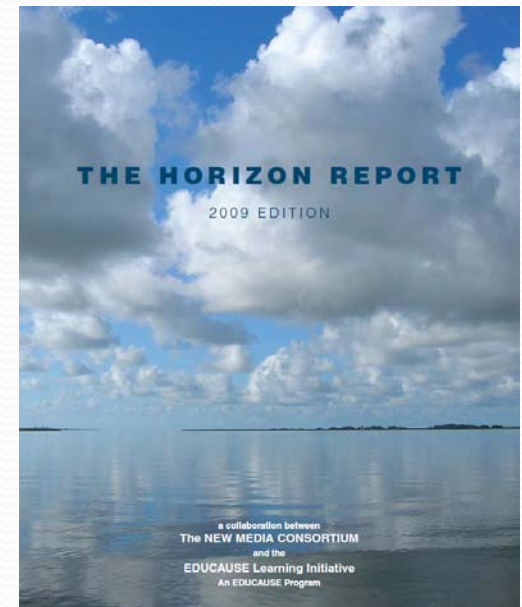
Jack Hebert
Worked on [In Quotes](#). Jack won't rest until Google News finds the news before it happens.
- 

Joe Marshall
Works on [Google Labs](#). When not

The Call for Networked School Communities

Horizon Report 2009 (Johnson, Levine, & Smith, 2009) identifies two technologies drawn from hundreds of technologies for three adoption horizons

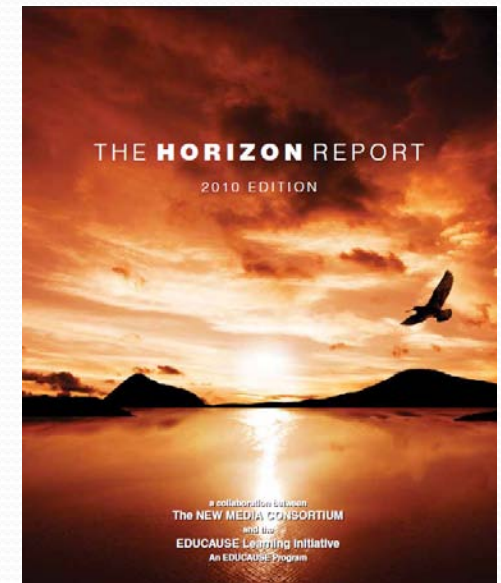
- First adoption horizon – *mobiles; cloud computing*
- Second adoption horizon – *geo-everything; the personal web*
- Third adoption horizon – *semantic-aware applications; smart objects*



The Call for Networked School Communities

Horizon Report 2010 (Johnson, Levine, Smith, & Stone, 2010)

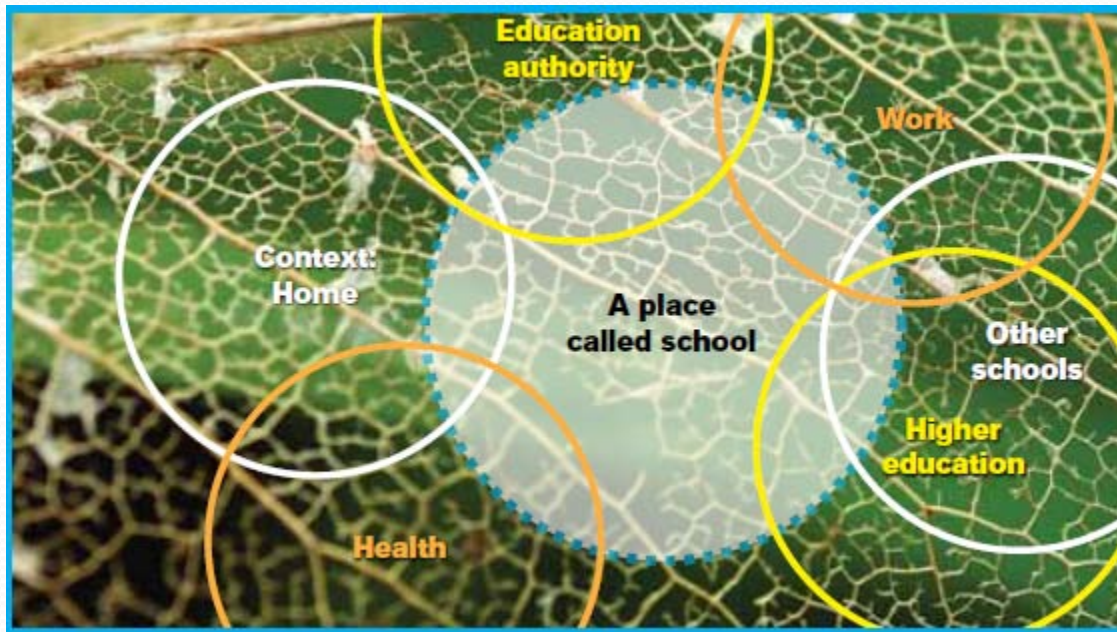
- First adoption horizon – *mobile computing; open content*
- Second adoption horizon – *electronic books, simple augmented reality*
- Third adoption horizon – *gesture-based computing; visual data analysis*



The Call for Networked School Communities - Metatrends

- Larry Johnson, CEO of The New Media Consortium at the launch of the Australian and New Zealand edition in September 2009, proposed that 7 ‘metatrends’ were evident from his analysis of the series of *Horizon Report issues*.
- His highest ranked ‘metatrends’ were that:
 1. *the people are the **network**;*
 2. ***networks** are everywhere;*
 3. ***collective intelligence**; and*
 4. *content is being **co-created** and is **everywhere**.*

Networked School Communities: The Vision



- Five organisational principles (Lipnack and Stamps, 1994)
 - Unifying purpose
 - Independent members
 - Voluntary links
 - Multiple leaders
 - Integrated levels

“Schools need to become network organisations, establishing themselves as the centre of diverse, overlapping networks of learning, which reach out to the fullest possible range of institutions, sources of information, social groups and physical facilities. To solve this problem schools need to become nodes on a network instead of isolated factories.”

- Illinois Institute of Design Think Tank 2007

The Home-School Divide OR The Home-School Difference

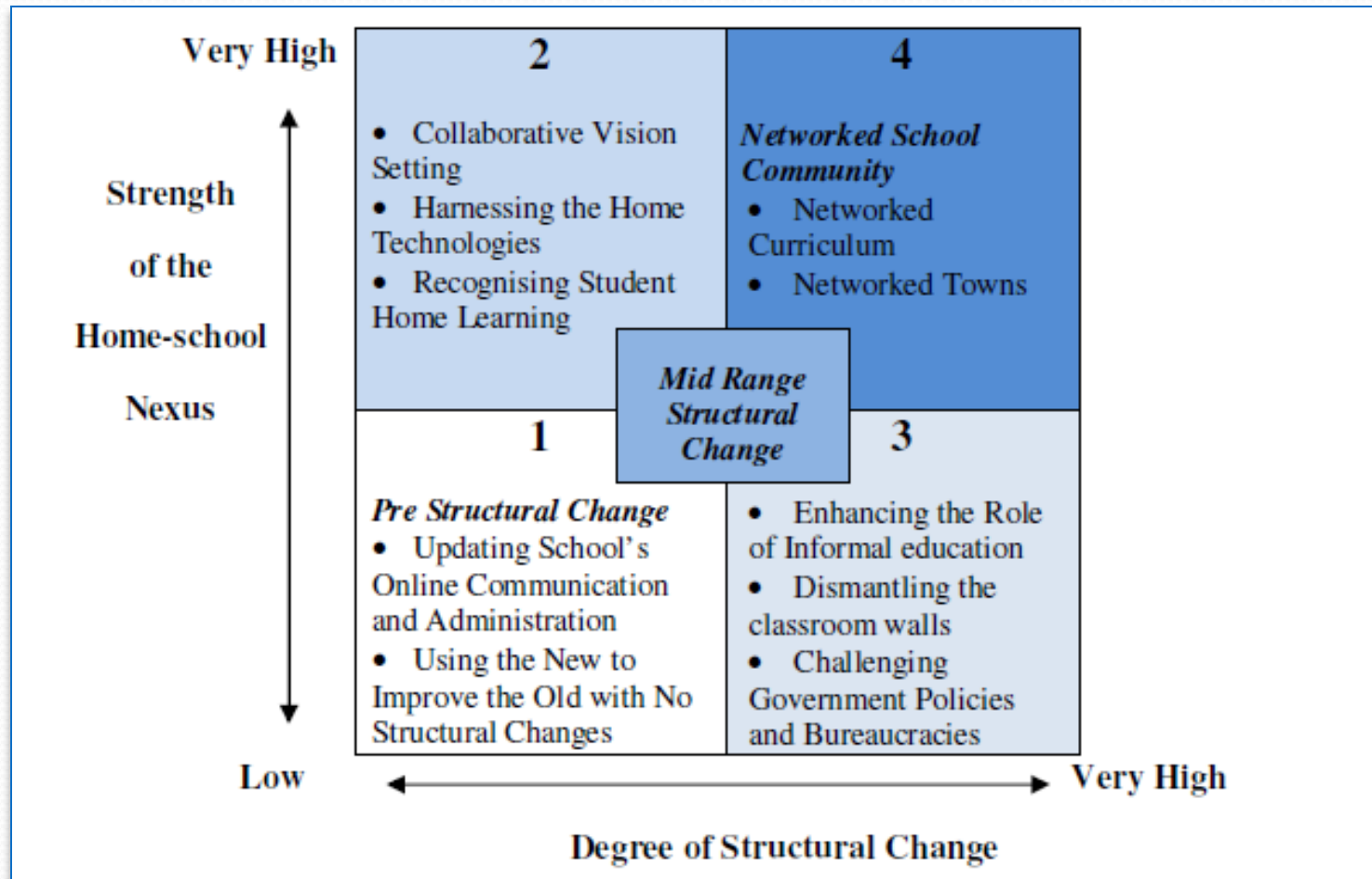
Classroom			
Items	Cost	Qty	Total cost
TV HD digital LCD 32"	\$1 200	1.0	\$1 200
HDD recorder	\$500	1.0	\$500
DVD player	\$120	1.0	\$120
VCR	\$120	1.0	\$120
PC Lenovo	\$1 270	6.0	\$7 620
PC Mac	\$1 400	6.0	\$8 400
Printer/Scanner/Copier MFDs	\$2 000	1.5	\$3 000
Net connections	\$1 000	0.8	\$800
Surround-sound home theatre	\$8 000	0.1	\$800
Digital camera	\$250	1.0	\$250
Digital video camera	\$600	1.0	\$600
Data projector	\$1 750	0.4	\$700
Interactive whiteboard 78"	\$2 850	0.2	\$570
Games consoles Wii/PS3/Xbox	\$350		\$0
iPods	\$200		\$0
Mobile Smart phones	\$900		\$0
Fixed phones	\$300		\$0
Instant Messenger/Skype			\$0
		Total	\$24 680

The Home-School Divide OR The Home-School Difference

Home			
Items	Cost	Qty	Total cost
TV HD digital LCD 32"	\$1 200	45.0	\$54 000
HDD recorder	\$500	30.0	\$15 000
DVD player	\$120	30.0	\$3 600
VCR	\$120	30.0	\$3 600
PC Lenovo	\$1 270	25.0	\$31 750
PC Mac	\$1 400	20.0	\$28 000
Printer/Scanner/Copier MFDs	\$500	30.0	\$15 000
Net connection (PA)	\$1 000	28.0	\$28 000
Surround-sound home theatre	\$8 000	25.0	\$200 000
Digital camera	\$250	30.0	\$7 500
Digital video camera	\$600	15.0	\$9 000
Data projector	\$1 750	4.0	\$7 000
Interactive whiteboard 78"	\$2 850		\$0
Games consoles Wii/PS3/Xbox	\$350	25.0	\$8 750
iPods	\$200	30.0	\$6 000
Mobile Smart phones	\$900	15.0	\$13 500
Fixed phones	\$300	25.0	\$7 500
Instant Messenger/Skype		30.0	\$0
		Total	\$438 200

Creating a Home-School Nexus

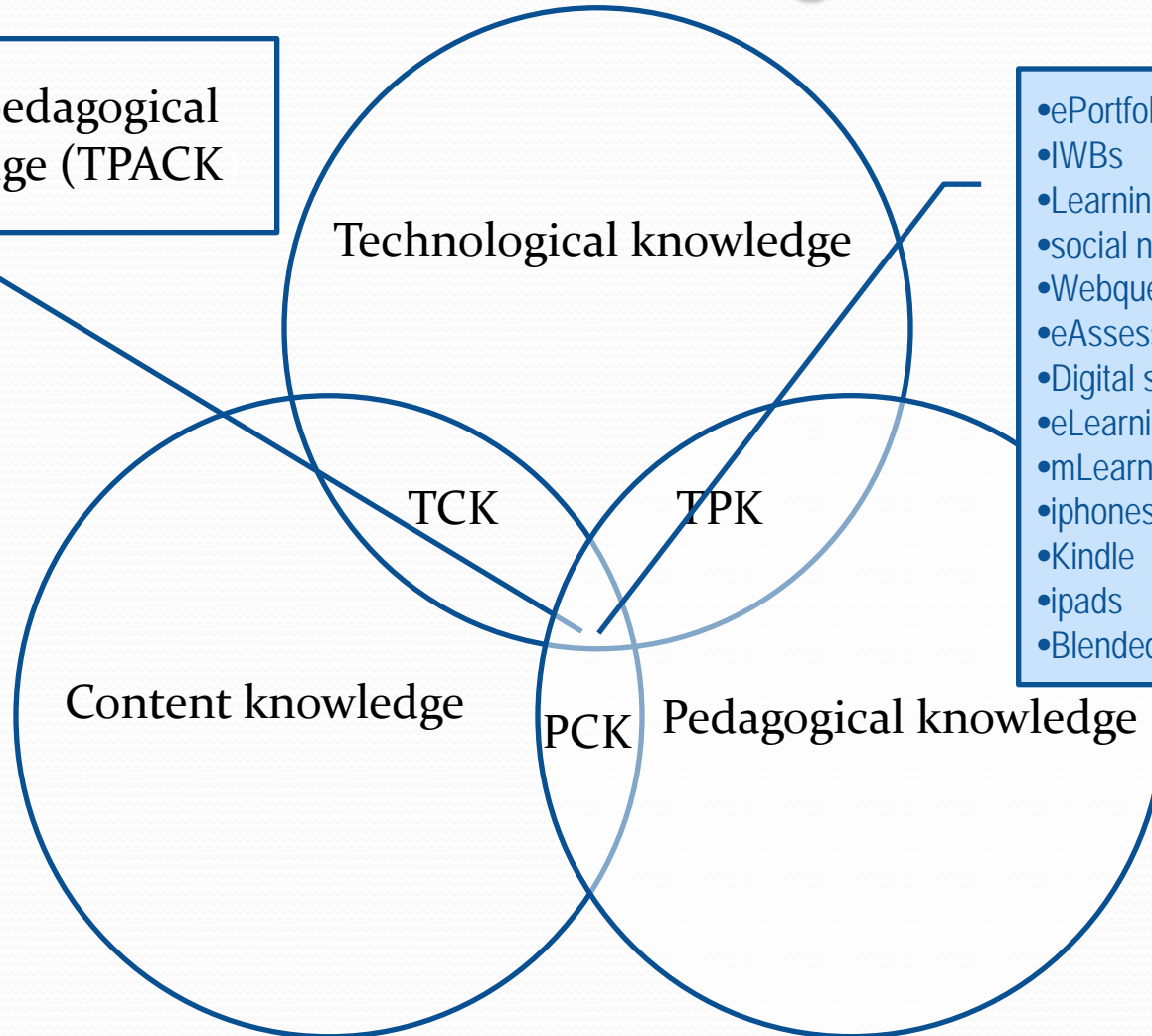
– Discussion: Where is your school located?



Creating a Home-School Nexus

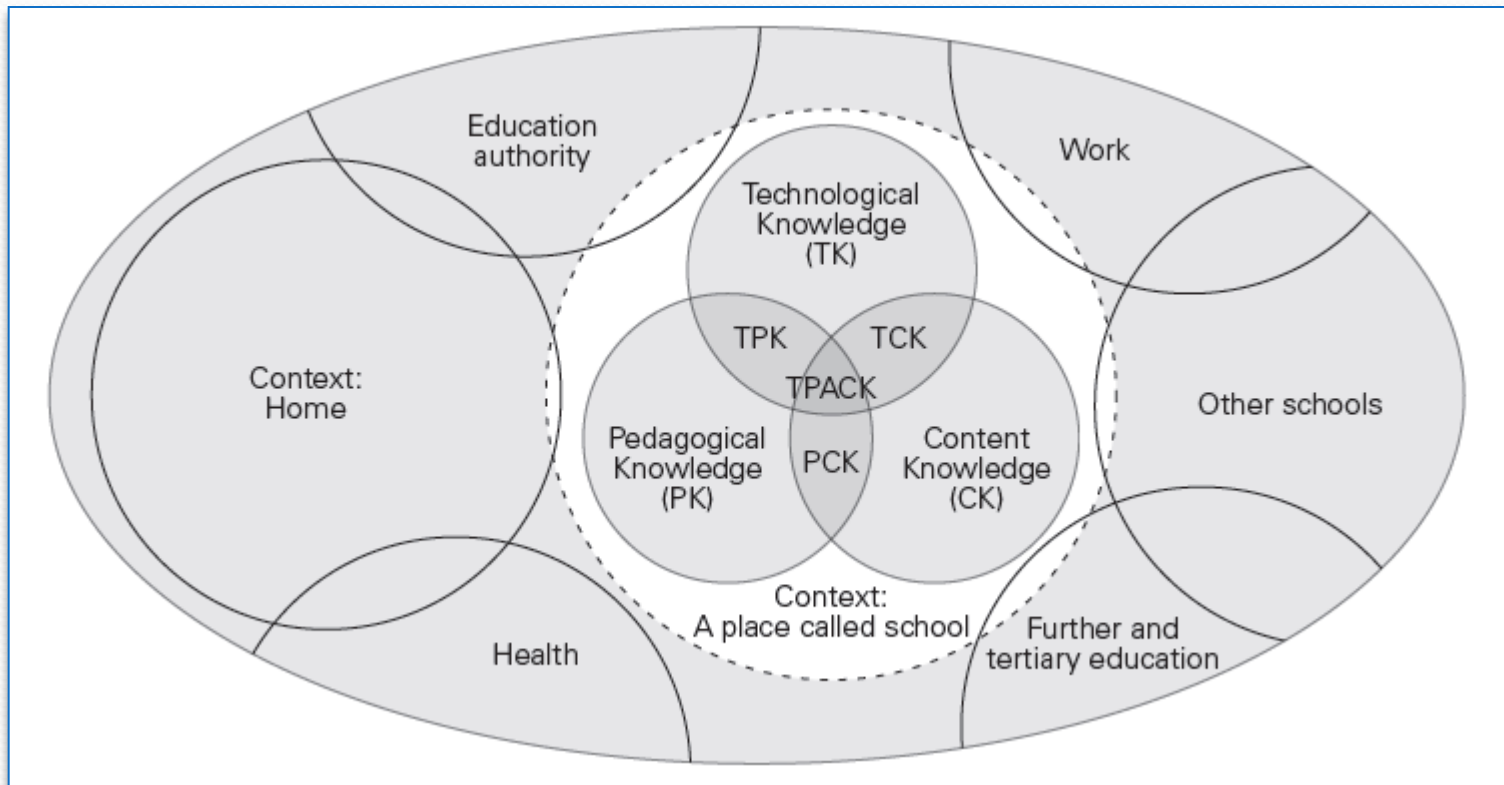
– Discussion: Is PCK enough? TPACK?

Technological pedagogical
content knowledge (TPACK)



- ePortfolios
- IWBs
- Learning Objects
- social networking – Web 2.0
- Webquests
- eAssessment
- Digital storytelling
- eLearning
- mLearning
- iphones
- Kindle
- ipads
- Blended learning

Creating a Home-School Nexus – TPACK and a place called school



Developing a Networked School Community – The Final Advice

- *Identify and learn from the Pathfinders*
- The **vision** – acknowledge the digital technologies and agency
- The **process** – consistent with networked, collaborative mode
- The **staff** understand and embrace the networked schooling community's **unifying purpose** and its operational principles
- Flexibility and an on-going review processes that allow the vision to be **reviewed** and **improved** over time.

Engage in <http://networkedschooling.ning.com>

