Networking to Shape Thinking and Practice in Education

SOCIAL AND COMMUNITY INNOVATION IN EDUCATION THROUGH TECHNOLOGY IN THE 21ST CENTURY

Networking to Shape Thinking and Practice in Education

SYMPOSIUM

New Rules for Engagement:

- communities of practice
- professional development and
- technology.

Networking to Shape Thinking and Practice in Education

Knowledge Management for the education sector

– 21st century ways of working

Prof/ Marilyn Leask, Brunel University

previously - 2006-08

Head of Knowledge and Learning

Improvement and Development Agency for local government

-> www.communities.idea.gov.uk

and previously – 2002-2006

Head of Effective Practices and Research Dissemination

Training and Development Agency for schools

-> www.ttrb.ac.uk

IDeA – the keeper of Knowledge for local government

Knowledge management philosophy:

Staff all have a role in:

- *Finding*
- *Using*
- *Creating*
- *Sharing*
- *Managing*

local govt. sector knowledge

Communities of practice for local government

Welcome to Communities of Practice

Connect to Collaborate to Innovate

This is a community platform supporting professional social networks across local government and the public sector. It provides a secure environment for knowledge development and sharing through online communities of practice.

Find out more

Register and become a member today.

Register

Announcements

Information Message The Beacons Scheme has launched three innovative and dynamic Communities of Practice for Round 10 of the Scheme, one of which will be a featured CoP in the box below each week for the next three weeks. Are any of interest to you? This week features the 'After Dark' CoP.

Information Message **New software enhancements have been released for the CoPs platform. The major change that you will notice is the creation of the new 'Community Hub' The Hub is a new community that all CoPs users will automatically be a member of. The purpose of the Hub is to encourage more inter-CoP communication and collaboration, and to provide a shared space for content that is of potential interest to all registered users. Full details are available from the phase 3b release note..**

Communities

New | Featured | Most active

After dark: Evening and Night-time economy

Find a community

Go

People finder

What will I find?

Networking across local government

- Wikis
- Blogs
- Forums
- News feeds
- Events
- Libraries

Find a community by tag

blogging collaboration commissioning community data development engagement equalities equality event guide improvement information innovation intelligence knowledge laa leadership learning local management meeting minutes motivation peerassist performance photo policy procurement recruitment retention skills skillsforlife social socialmedia strategy talent toolkit training workforce

Done Internet 100%

Rationale

-KM to industry standard
- online and offline CoPs support sector led improvement through enabling *knowledge sharing, benchmarking, peer challenge and collaborative working*.
- Recruitment and retention -> *attractive environment for potential new employees*.

Progress

- Facebook for local government
- launched January 2007:
- Jan 08 7,000 users
- Sept 08 - 500 plus communities and 17,000 users
- March 09 - 23,000 users
- provides web 2.0 technologies in online workspaces
- People finder

- new forms of knowledge creation
- New forms of dissemination
- Induction for new staff: access to tacit knowledge
- Scottish Improvement Service a partner and Science establishment at Danesbury a partner
- Many govt. ministries using it to connect with practitioners
-

A Tale of 2 ministries

Local Government: 1.3M employees

- Communities and Local Government (CLG) – the ministry
- Local Govt. Assoc. – paid by LA subscription
  - Remit: lobby govt.
- Central govt. improvement role: IDeA – owned by LGA, funded by CLG - £20M plus
  - providing consultants, Web resource, newsletters, CoPs

Education Sector 1M employees

- DCSF – the ministry
- GTCE – paid by individual subscription
- Central govt. improvement role: Becta, NCSL, CWDC, TDA, QCA, Strategies

Returning to Education World – Soc15C with a touch of early 20th C

- Villages (SIGs) connected if at all by mud tracks with no maps
- Innovators and early adopters constrained from visiting different villages
- Some telephony but no phone books
- A library with uncatalogued books
- Some pioneers trying to chart the territory
- Village noticeboards muddled and not maintained
- Peddlars the main bearers of knowledge from one village to the next
- Dialects confusing communication
- Annual regional markets for knowledge exchange
- Temporary village halls
- Top down wisdom

MIRANDANET FELLOWSHIP

Sharing experience and expertise

Have a look at some of the MirandaNetters' Blogs

The MirandaNet Fellowship, founded in 1992, is an e-community of practice for international ICT policy makers, teachers, teacher educators, researchers and commercial developers who are passionate about digital technology in teaching and learning and about using technologies to promote cultural understanding and democratic participation. Currently there are over 850 members in 43

CLASSROOM 2.0

WELCOME!

Welcome to Classroom20.com, the social network for those interested in Web 2.0 and collaborative technologies in education.

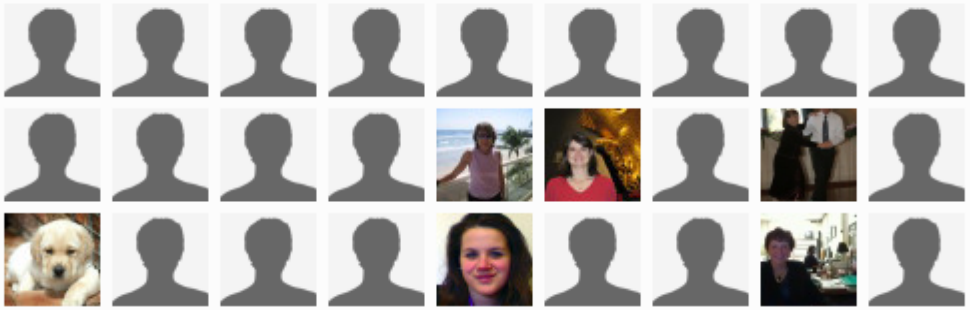
We especially hope that those who are "beginners" will find this a supportive community and a comfortable place to start being part of the digital dialog.

If you are new here, please consider introducing yourself by going to the introductory forum message. You should also feel free to explore! Here are some starting tips and a "Tour of Web 2.0" webcast video, or you can ask help of a "host" below.

If you are representing a commercial entity, please see the specific guidelines on your participation. Please also read our "spamming" policy.

(Note: If you can see this site from school but have any difficulty actually signing up from that school location, it may be a filtering issue related to the sign-up security pages. You may have to

Members



+ Invite More View All

PBS & Classroom 2.0 Live Webinar

PBS Teachers® and Classroom 2.0, with support from Elluminate, are partnering on a series of free monthly webinars designed to help preK-12 educators learn new ways to integrate online instructional resources in the classroom and engage students in curriculum lessons. On March 18th at 5pm Pacific / 8pm Eastern we are delighted to have the Folger Shakespeare Library as our guest for "*Remixing Shakespeare for 21st Century Students.*" More information here.

Our Weekly Classroom 2.0 LIVE! Show

The topic this Saturday (March 7) is **"Twitter for Teachers"** with special guest Rodd Lucier. Please join us to talk about using twitter in the classroom to collaborate and share with teachers and students. Our Newbie Question of the Week will be "What is Twitter and

About Classroom 2.0

Steve Hargadon created this social network on Ning.

Create your own social network!

More Search Tools

Google Classrom 2.0 Search

Search

Search All Ning Networks

Search

Search More: go to Conversations.net

Visitor Map

File Edit View Favorites Tools Help

Google times educational supplement Search Bookmarks Find Check AutoFill Sign In

TES Critical thinking / Forums / TES

Page Tools

Start new topic

Page 1 of 1 (15 items)

All TES forums

Subject

- Art
- Business studies
- Design and technology
- Drama
- English
- Geography
- History
- ICT
- Mathematics
- Media studies
- Modern foreign languages
- Music
- Physical education
- PSHE
- Religious education
- Science
- Social sciences
- Classics
- Citizenship
- Critical thinking
- Performing arts

Stage

- Children's centres
- Early years
- Further education
- Mixed age
- Primary
- Secondary

Select colour: Grey Blue Green Sand

Welcome to the forum 0
Topic started by Blueboo on 11/12/08 at 10:47
Last Post by Blueboo on 11/12/08 at 10:47

Six Thinking Hats -- de Bono
Topic started by evariste_galois on 04/02/09 at 18:04
Last Post by duncanwil on 04/03/09 at 21:18

Video clips
Topic started by gavinmurray on 02/03/09 at 22:20
Last Post by davidyates on 03/03/09 at 07:21

Thinking critically...
Topic started by dinx67 on 28/02/09 at 21:31
Last Post by doglover on 28/02/09 at 22:50

So why just critical thinking?
Topic started by geffone on 29/12/08 at 16:49
Last Post by ferkovax on 27/02/09 at 23:02

reflective thinking
Topic started by ferkovax on 21/02/09 at 09:11
Last Post by ferkovax on 21/02/09 at 09:11

New OCR Spec
Topic started by egyptiangirl on 12/12/08 at 17:20
Last Post by davidyates on 11/02/09 at 18:22

OCR Reasoning and Thinking Skills
Topic started by cathard on 27/01/09 at 21:38
Last Post by davidyates on 05/02/09 at 18:39

Be the first to hear about the latest resources, the hottest teacher discussions, breaking news and the latest jobs.

now

OCR Reasoning and Thinking Skills - Posted by 'Cathard' – other postings are by 'Karvol; 'egyptian girl', 'delfone' etc

Internet 100%

About Becta - Harnessing Technology regional **forums** for local ...
... Harnessing Technology regional **forums** for local authorities - Yorkshire & Humberside region. 18 November 2008. Park Plaza Leeds. Boar ...
events.becta.org.uk/display.cfm?resID=38633

About Becta - Learning and Technology World **Forum** 2009 - Becta
... Learning and Technology World **Forum** 2009. ... The Learning and Technology World **Forum** 2009 will retain the closed sessions which ministers have found so valuable. ...
events.becta.org.uk/display.cfm?resID=37632&page=1619
[More results from events.becta.org.uk/display.cfm]

Becta Local authorities - Learning and Technology World **Forum** 2009
... Learning and Technology World **Forum** 2009. ... The Learning and Technology World **Forum** 2009 will retain the closed sessions which ministers have found so valuable. ...
localauthorities.becta.org.uk/index.php?rid=15585

About Becta - Harnessing Technology regional **forums** for local ...
... **Forums** will be held in each of the nine government regions on a termly basis and we aim to create an open and engaging atmosphere to further ... **Forum** objectives. ...
about.becta.org.uk/display.cfm?resID=38664

About Becta - Global **forum** launched to highlight importance of ...
... Global **forum** launched to highlight importance of effective use of technology in education. ... Notes to editors. About the Learning and Technology World **Forum**. ...
about.becta.org.uk/display.cfm?resID=38969
[More results from about.becta.org.uk/display.cfm]

Becta Government & partners - Harnessing Technology: Research ...
... Harnessing Technology: Research **forum** 2007. 17 September 2007 RSA, London. This event brought together policy makers, the ICT research ...
partners.becta.org.uk/index.php?rid=14271

About Becta - Board meeting May 2008: Paper 5 - World Education ...

Communities of practice?

Q1) CoPs - a locus for knowledge creation for next practice? *providing just in time CPD?*

Q2) Do we need a national online CoP architecture? *whose remit? who needs CoPs? who funds them ? who manages them? who creates them?*

Q3) How do educators create, stimulate and sustain communities of practice?

Examining

Implementing

Managing

collaborative tools/social software via online communities of practice

Professor Marilyn Leask
Brunel University
Director *Collabor8Now! Web 2.0 consultancy*

Overview

1. Background
   - KM and ICT – web 1.0 (read)
   - KM and social software/web 2.0 (read/write) especially IDeA online Communities of Practice (see also Lawrence Hall and Steve Dale in the following workshop) www.communities.idea.gov.uk
   - Definitions

2. Social software at work? BAN IT!!!
   - IDeA/LGA view
   - Practicalities

3. Management issues:

   - examining, implementing, managing

2. Ban it!!!…or could you use it???

a) How does social media, specifically Web 2.0 fit with KM, generally?

b) What are the benefits of using social media over other tools?

c) Moving beyond the basics to the practicalities of why and how should people use blogs and wikis

d) Establishing a culture where people recognise how valuable collaborative working can be

e) Encouraging knowledge sharing; finding ways of linking tools directly with staff jobs and priorities

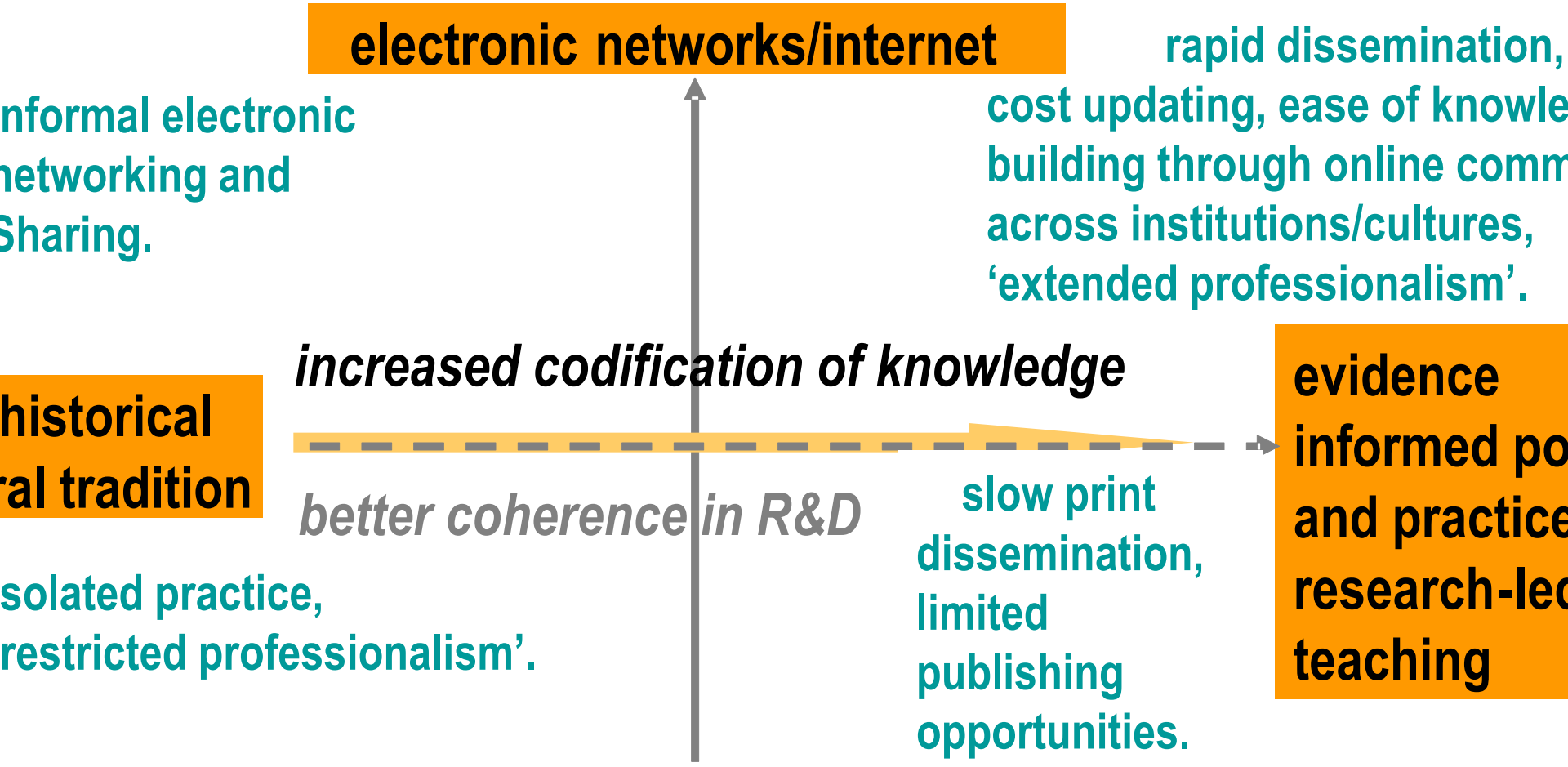
f) Addressing the tension between developing tools that drive greater openness versus tighter controls on data handling.

2. ctd

a) How does social media, specifically Web 2.0 fit with KM, generally?

- Web 2.0 – what can we do differently?
- KM behaviours:
  - Finding, using, sharing, managing, creating…
- How did we manage before?

Figure 1: Moving from 19th to 21st C professional practi



2. ctd

b) What are the benefits of using social media over other tools?

- history
- inclusiveness
- capacity building

What are the alternatives?

- more face to face communication?
- More email?
- less communication?

2. ctd

c) Moving beyond the basics to the practicalities of why and how should people use blogs and wikis

- Blogs
  - Whose ideas are worth listening to?
  - Effective use of staff time
- Wikis
  - Collaborative writing: Who, why, when?

2. ctd

d) Establishing a culture where people recognise how valuable collaborative working can be

- Are the benefits obvious?
- Why not?
  - Competition?
  - Culture?
- See next slide

2. ctd

e) Encouraging knowledge sharing; finding ways of linking tools directly with staff jobs and priorities

- Managers as role models
- Appraisals
- Goal setting: personal/organisational: goal of the month
- Rewards
- Job descriptions
- Induction – establishing organisational ethos
- Leaving processes
- VISION: 5 behaviours: finding, using, sharing, managing, creating.

2. Ban it!!!…or could you use it???

f) Addressing the tension between developing tools that drive greater openness versus tighter controls on data handling.
   - What are the risks? Personal/organisational?
   - What is the worst that could happen?
     - Hacking?
     - Bullying?
     - Silences?
     - Confidentiality issues…
     - Retention of info…for the rest of your working life..

3. Management issues.

What do you need to know to make decisions?

a) Examining:

cost benefits/ resource implications?
staff readiness/organisational benefits?
open source/bespoke?
tools – which? switch on and off?

b) Implementing:

management buy-in?
training?
carrot or stick?
evaluation?

c) Managing

success criteria?
appraisals? Induction?
future costs?

Knowledge sharing and peer assistance

If social software is used in your organisation:

- *What is going well?*
- *What could be improved?*

If you are you thinking of using social software:

- now is your chance to ask the group a question or two….

Learning and sharing knowledge online

Marilyn will tell us of her experiences getting large-scale online knowledge communities up and running – focusing on strategy, development approaches, operation and monitoring. These have included TeacherNet, European SchoolNet, and the Improvement & Development Agency.

Large scale online knowledge communities

- Strategy
- Development approaches
- Operation and monitoring
- Teachernet www.teachernet.gov.uk
- European SchoolNet www.eun.org
- Teacher Training Resource Bank
- www.ttrb.ac.uk
- Online communities for local government www.communities.idea.gov.uk

Figure 3 shows the steady increase in registrations to over 1000 per month – with dips around Easter and Christmas.

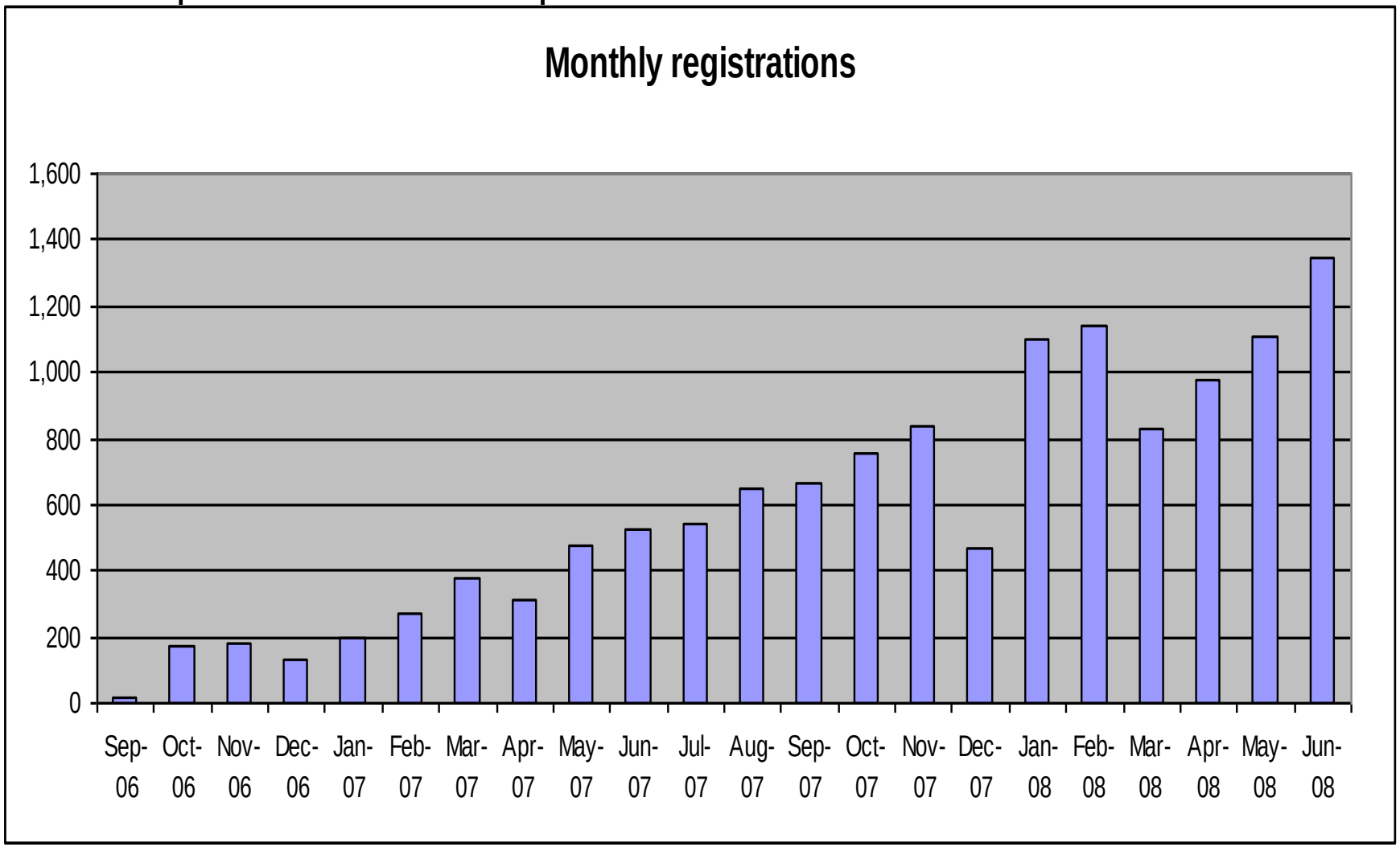
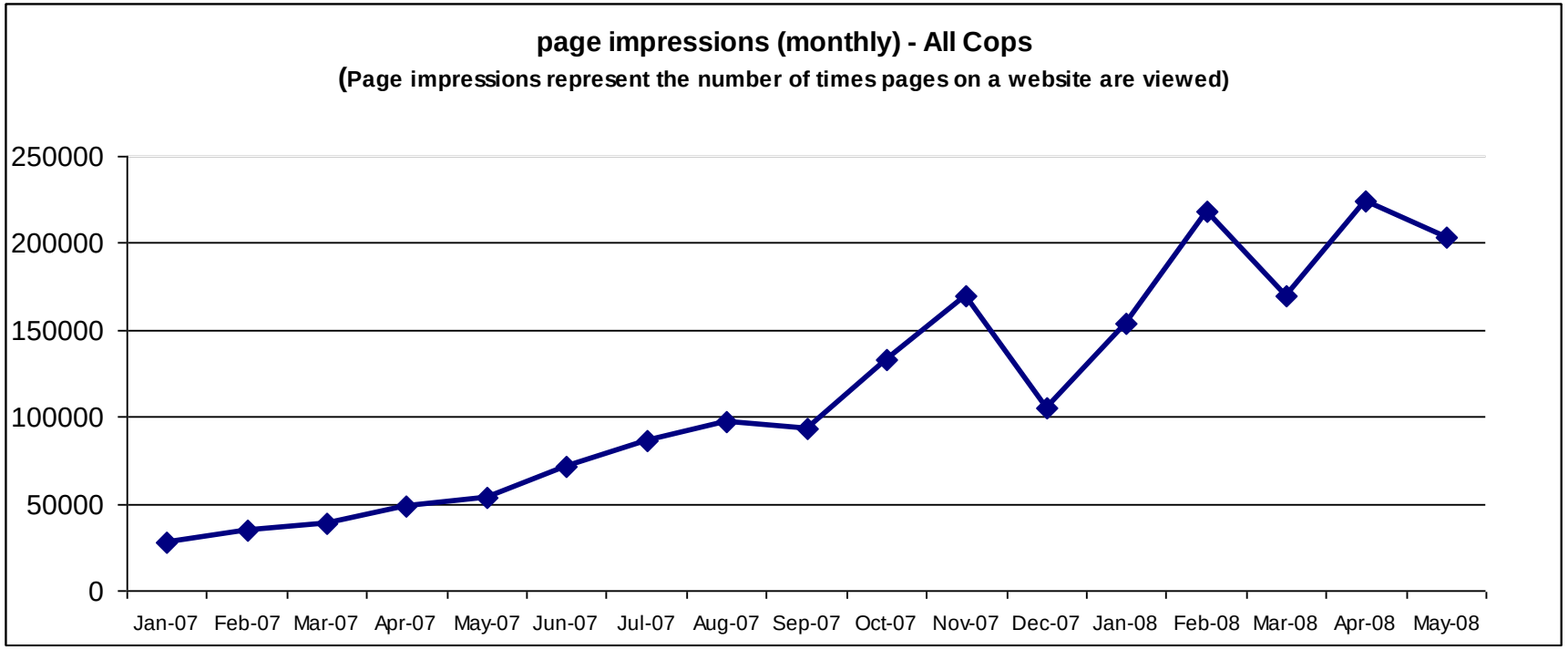


Figure 2 shows a steady increase in pages viewed – with dips around Easter and Christmas.

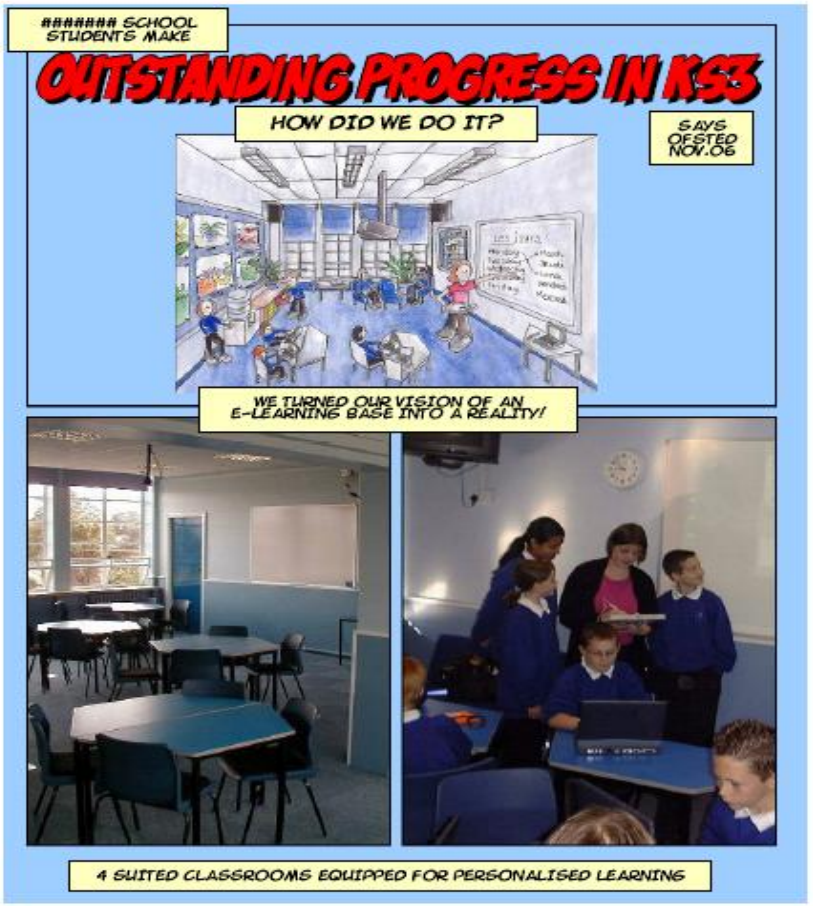


Changing teachers' professional practice: the significance of communities of practice

- Communities of practice – found across the sample of schools
  - identified at *department level*
  - though *not subject dependent*
  - all examples shared similar characteristics:
  - mutual engagement; joint enterprise; shared repertoire (Wenger, 1998, p72-85)
  - CoPs afforded '*situated innovation*'
  - in '*transformational spaces*'
- Creating new knowledge together: communal constructivism (Leask and Younie 2001)

Attending to the factors that serve to enhance or inhibit change in practice with technology

- Previous research and much Becta research fails to account for the *cultural dimension of change*.
- - it is necessary to move away from technical, financial and micro-political accounts of change, which *privilege* such factors and
- - attend to the *culture* in which the processes of change are situated – **CoPs**: teachers as professional groupings, located in depts/schools



Engendering change with technology: situated learning within a community of practice

- **CoPs - cultures of collaboration**
- key factor was the role of situated learning about ICT alongside colleagues,
- with opportunities for discussion and reflection
- accentuates the importance of the social dimension of teachers' learning and participation in a CoP
- enables dialogue, analysis and evaluation of new skills and knowledge, which
- constituted a departmental discursive dynamic and culture of ICT use.

A challenge or an opportunity for the academic world?

Emerging models of knowledge creation and transfer through the online Communities of Practice for local government

Prof. Marilyn Leask, Brunel University

Director of Collabor8now – a web 2.0 consultancy

Summary

1. **Background to IDeA CoPs**
2. **Purpose of the initiative**
3. **Definitions**: Web 2.0; Knowledge management: as a discipline – private and public sector
4. **Research data**
5. **Learning theories:** Emerging models of knowledge creation and transfer
6. **New R&D opportunities** for academics
7. **Technical context**

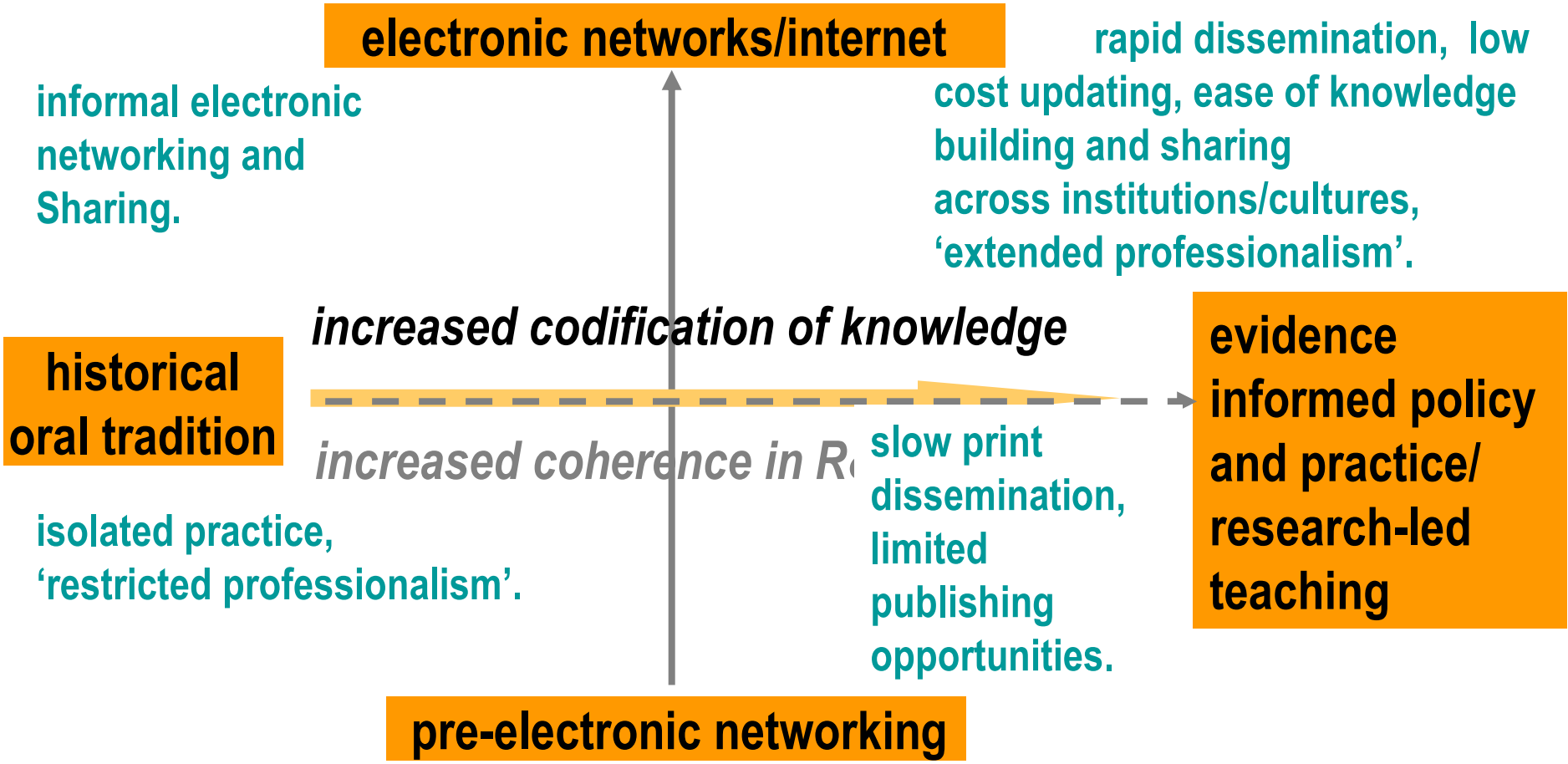
1. Background: IDeA online communities of practice for local government

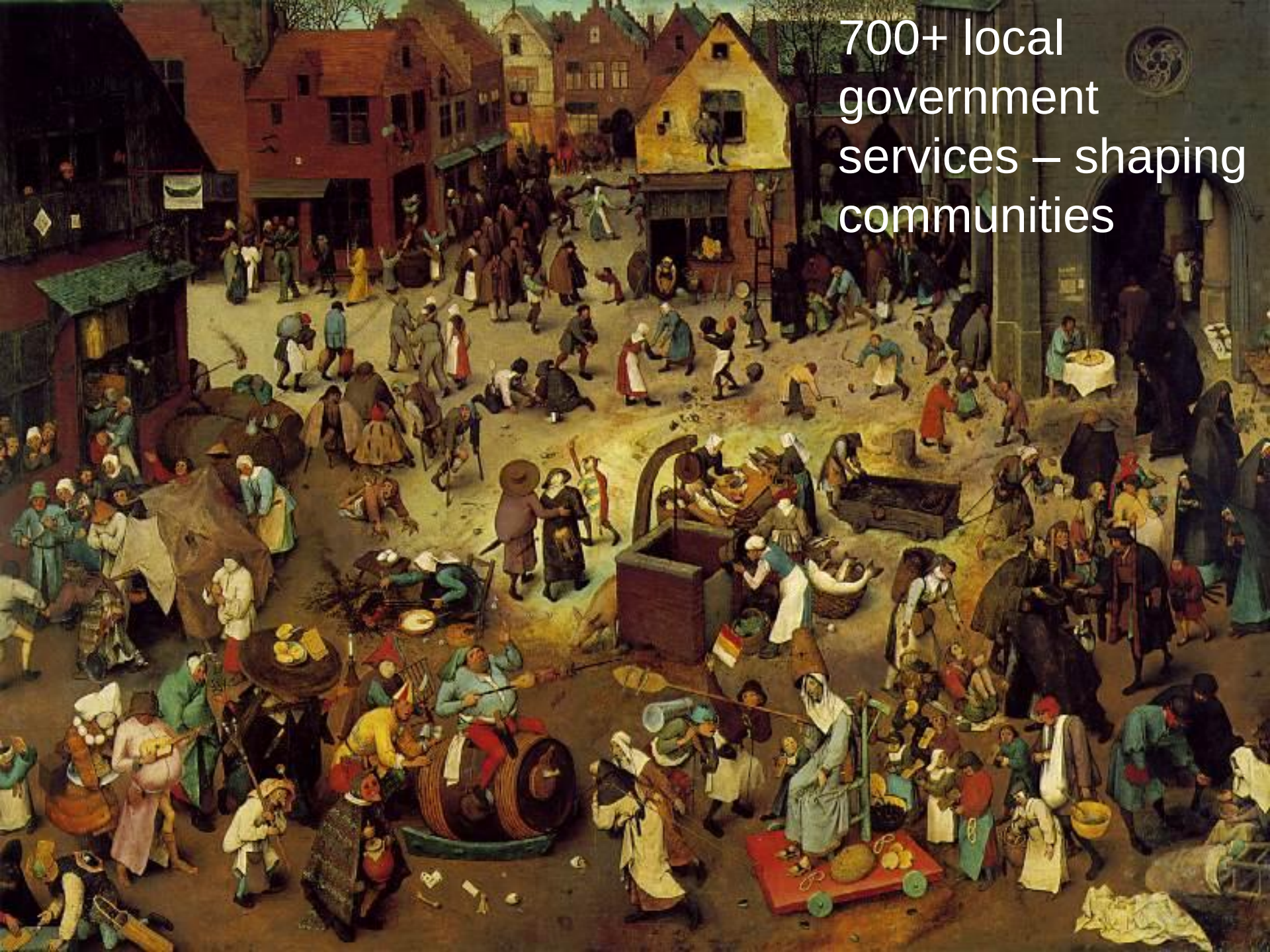
www.communities.idea.gov.uk

- The Improvement and Development Agency for local government - Knowledge Management Strategy
- Size and scope of local government:
  - 2.25 million employees including education
  - Spends £1 in every £4 of tax payers money
- My role: Head of Knowledge and Learning – knowledge management strategy and knowledge dissemination, development using ICT

See Leask, M. (2004) Using research and evidence to improve teaching and learning in the training of professionals – an example from teacher training in England www.ttrb.ac.uk

Figure 1: Moving from 19th to 21stC professional practice




700+ local government services – shaping communities

2. Purpose of IDeA CoPs

- knowledge transfer
- knowledge creation
- benchmarking
- professional development – just in time
- peer challenge
- rapid induction of new staff
- a 21stC work environment
- value for money for the tax payer through kn. Sharing
- Connections practitioners<-> policy makers

Tools Help

Go Bookmarks 1 blocked Check AutoLink AutoFill Send to idea communities

Practice | Welcome

Communities of practice for local government

Welcome | All Communities | People Finder

Are you already registered? Email ••••••••• Sign in

Welcome to Communities of Practice

Connecting people to learn and share.

This online community platform supports professional networking across local government and the public sector. It is a freely accessible space that enables knowledge development and sharing through online communities of practice and networks.

Registered members can join communities, create their own, connect with their peers and domain experts, arrange meetings, participate in forums, up-load documents and participate in conversations.

To join a community or network, you need to register with the online community platform first and then apply to join the relevant community. Community facilitators will respond to each membership request.

If you are based in England and Wales and want to set up a community space please email communities@idea.gov.uk

If you are based in Scotland please email communities@improvementservice.org.uk

This service is provided by the Improvement and Development Agency for local government and a partnership is in place with the Improvement Service for local government in Scotland.

Register to access the following features

Register and become a Communities of Practice member today.

Register

Find a community

Community name Go

Most active communities

Facilitators' Community

Knowledge management challenges

- 700 plus services; 14% staff turnover
- Has to respond to immediate political and community concerns
- Need for just in time knowledge

3. Definitions: Web 2.0; Knowledge management: as a discipline

- **Web 2.0** read and write (Web 1.0 – read only)
- IDeA Web 2.0 tools: private or public online workspaces with: wikis (for collaborative online writing – no equivalent pre ICT); forums; blogs (web diary/log)
- See www.communities.idea.gov.uk

- **KM:** Five expectations of staff: sharing, using, finding, creating, managing Knowledge
- central govt KM council; KM roles public/private sector
- KM in all staff job roles and in appraisal documents
- Tools: peer assist; knowledge exchange (departing staff); information management (intranets, files)
- *See www.idea.gov.uk*

4. Research data – still confidential

1. Research and data collection are ongoing
2. January 08 e-survey sent to 6850 users, 5% response rate within 24 hours
3. Monthly reports: applications for CoP setup; membership applications; usage data: article downloads, visits, patterns of use
4. Case studies

5. Learning theories and emerging models of kn. creation and transfer

Learning theories (see Capel, Leask and Turner Learning to teach in the secondary school 5th edition 2009 for summary):

- just in time learning/readiness to learn
- scaffolding learning/social constructivism: learning from experts (Bruner and Vygotsky's theories)
- Something new? communal constructivism post-Vygotskyian learning theory specifically relevant to online environments see Leask and Younie, 2001; Preston, 2007, Holmes et al 2001). Online resources and support available through the CoPs seem to be providing a unique resource for professional development of staff with collaborative co-construction of knowledge experts to expert/creating new knowledge together

Opportunities for the academic world

- cost-effective engagement with practitioners and their concerns
- collaborative research opportunities
- ease of identification of leading edge practitioners
- rapid and cost-effective dissemination of outcomes from R&D programs
- accreditation of new forms of learning

Threats for the academic world

- Lack of engagement in development of new knowledge
- Missed opportunities for the dissemination of research
- academics are on the sidelines of major development initiatives

6. New R&D opportunities for academics

1) Political context: - evidence informed policy and practice

Would you feel comfortable about your research being used as a foundation for government policy? Are the results generalisable? Is the evidence base secure enough?

2) Technical context: - opportunities supported by online tools such as CoPs to network with practitioners, work collaboratively; collect data in new ways and new forms

Does this way of working in collaboration with practitioners allow for scaling up your small scale research?

3) 21st C models of academic work: - Existing models of research may need updating e.g. using cost-effective online networking with practitioners to scale up promising research studies so that educational research community provides outcomes support expectation of evidence informed practice and policy.

How might membership of some of the communities benefit the roles of academics and practitioners?

7. Technical context

- IBM websphere
- Bespoke solution
- Designed by Steve Dale - Semantix
- Developed by Conseq
- Change management approach to the local government sector – based on Rogers ‘Diffusion of innovation theories’
- Capable of low cost replication of individual CoPs and the whole environment for specific sectors

Further details

- **References:** See handout

- **Contact details:**

Professor Marilyn Leask
Director *Collabor8Now*
School of Sport and Education
Brunel University (West London)
Uxbridge
Tel: 01895 274 000
Email Marilyn.Leask@brunel.ac.uk

Central governments' drive for Evidence informed policy and practice

Education

- EPPI centre (DCSF/TDA/NHS funded)
  - http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=64
  - History of systematic research synthesis
    - http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=68
- Teacher Training Resource Bank (TDA funded)
  - www.ttrb.ac.uk
- Campbell collaboration

Health – professionals initiatives

- Cochrane collaboration
- Map of medicine

Local government

- Local government knowledge
  - www.idea.gov.uk
- Evidence library

- Online communities of practice

Reviews of government departments

International initiatives

- OECD
- World Health Organisation EVIDENCE-INFORMED POLICY NETWORK
  - http://www.who.int/rpc/evipnet/en/
- Health Research Council for New Zealand
  - http://www.hrc.govt.nz/root/pages_news/Maximising_the_benefits_of_partnerships_for_evidence-informed_policy_and_practice_2006.html

- OECD (2007) *Evidence in Education Linking Research and Policy,* Paris, Centre for Educational Research and Innovation

http://blogs.usyd.edu.au/eresearch/2007/07/scientific_and_educational_res.html

- E-Research for Education
- Policies, methodologies, applications and implications
- « Sydney's Talks: E-research & Education | Main | Events: USQ Systemic Infrastructure Initiative's Projects Road Show »
- **Scientific and educational research in a complex and exponential word**
- *by Lina Markauskaite*
- 21 July, 2007
- This entry is an eclectic summary of the key trends in scientific research methodologies, technologies and practices followed by some reflections about the state of the art and future of the educational research. Essentially this blog is a mashup of ideas from three unrelated in a structured world readings and some outsider's thoughts that link them in a complex world.
- **Sources:**
- Alex Szalay: *Science in an Exponential World*. Paper presented at eResearch Australasia Conference, Brisbane, 26-29 June 2007. URL
- OECD: *Evidence in Education: Linking Research and Policy*, 12/06/2007. OECD, CERI. URL
- Uri Wilensky and Michael J. Jacobson: *Complex Systems in Education: Scientific and Educational Importance and Implications for the Learning Sciences*. Journal of the Learning Sciences. 2006, Vol. 15, No. 1, Pages 11-34. URL
- Evolution of scientific inquiry
- EMPIRICAL: Thousands years ago in Aristotle's era modern science was empirical, i.e. based on careful observation and description of natural phenomena.
- THEORETICAL/LOGICAL: Hundreds years ago modern science became theoretical. E.g. Newtown's, Kepler's, Euler's and other similar discoveries were based on logical reasoning, generalisations and mathematical manipulations.
- COMPUTATIONAL: About two decades ago science became computational, i.e. based on computational modelling, simulations of complex phenomena, visualisations, etc.
- EXPLORATORY and DATA DRIVEN: Today's main scientific discoveries are based on data exploration, i.e. synthesis of theory, experiment and computation using advanced data management and statistics (e.g. data mining).
- **View from the educational trench:** Almost all present educational research belong either to empirical or to logical research category (i.e. "qualitative" and "quantitative"). Computational and data driven research are rather vision (e.g. Wilensky & Jacobson, 2006) and isolated experiments (e.g. DM website) than valued evidence for educational decision making (e.g. OECD, 2007). Critical educational issues in essence require complex investigations of social and educational processes (not only outputs) and modelling (i.e., computational and exploratory techniques).
- Tested rules of thumb for scientific discoveries
- Sensors for data gathering become inexpensive
- Federation of N data repositories has utility O(N2) and possibilities for new discoveries rise at ratio O(N2)!
- Discoveries are made…
  - at the edges, boundaries, inter-connections.
  - going deeper, collecting more data, using better visualisations.
- **View from the educational trench:** Some "sensors" are cheap (e.g., e-learning transcripts, administrational data), some are still expensive (e.g., national and international surveys). Most present educational datasets are small, distributed and not interrelated. Most datasets typically belong to a single researcher, group or institution. They are rarely reused and typically discarded at the end of the research project. Data valued by its users (i.e. individual researchers), but not society. Research of lifelong ubiquitous learning needs continuous integrated data flow from "multiple" sensors (i.e., quantitative and qualitative in the form of numbers, texts, sound, video…) during entire lifespan. Present data collection, management and preservation approaches create very few opportunities to go deeper, integrate or look at boundaries.
- Sociology and technology
- Technology driven social changes are unpredictable, and nobody knows what will come and/or go next: YouTube, Google?
- Technologies (and world) are changing too fast: there is no time for top-down engineering of networks, data and/or research.
- **View from the educational trench:** (E-)educational developments partly mirror technology-driven social developments: e-learning, m-learning, W2-learning,

EducationConsultant to Best Evidence Medical Education (BEME) Research & Evaluation Consultant, HEA Health Sciences & Practice Research into effectiveness of interprofessional education Chair, Centre for the Advancement of Interprofessional Education

Dr Marilyn Hammick

September 08 2006

- **No more than 20% of medical practices have been adequately evaluated**

Eddy 1994

- **Use of individual expertise and best available evidence**

Sackett et al 1996

- knowledge management theories (Eraut, 1994; Fielding et al, 2003; Rogers, 1995; Lave and Wegner, 1991; Wegner, 1998).
-
- Much professional knowledge is provisional – it is continually being improved upon.

- **Leask, M. (2004) Using research and evidence to improve teaching and learning in the training of professionals – an example from teacher training in England, published on Educationline.**
- Hoyle, E. and John, P. (1995) *Professional Knowledge and Professional Practice,* London: Cassell.