@ Oxford

Summer Conference

5th – 7th
July 2012

St Anne's College
Oxford

Welcome to St Anne's College, Oxford

This year's conference combines research and practice. It will be the first in a new series of biennial conferences that will combine the biennial Research seminar with the annual, practice-based summer conference.

Given the current developments in Initial Teacher Education (ITE) and the proposed changes to Information and Communication Technology (ICT) as a subject in the English National Curriculum, this will be an excellent opportunity to hear experts' views and to discuss the opportunities for developments in ICT/Computing/IT in both Initial Teacher Education and Education more widely.

The programme includes key note speakers who are national and international experts in ITE and ICT/Computing alongside papers and presentations on ITE and Technologies and discussion groups on topics relevant to ITE and ICT/Computing in Education.

We hope that you will enjoy the Oxford experience this year.

Kate Watson and Sarah Younie

conference organisers

College notes

The following notes have been provided for all delegates by the college:

1) **We have a "no smoking indoors" policy and we ask that everyone smokes only at the 14 designated points shown on the college plan (included in delegate pack).**

2) We have a no cycling policy within College for Health and Safety reasons.

3) We ask that all cycles are parked in the area adjacent to the Banbury Road.

4) We ask that everyone is quiet between midnight and 08.00 am.

5) We ask that you go to the Fire Assembly Points shown on the attached plan in the event of a fire alarm.

6) Please make you know the fire procedure detail. A site map showing fire assembly points are on the back on each bedroom door.

7) We ask that all persons follow the instructions of Lodge Porters in the event of a fire or emergency.

8) We ask you to contact the Lodge if you have any emergency or see something suspicious (the Lodge is 01865-274800).

9) We recommend that you lock your bedroom door at all times.

10) We ask you not to divulge entry door codes to anyone you do not know.

11) Check-in is at the Porters' Lodge from 13.00 hrs.

12) We request that you vacate your room by 10.00 am on your last day in College. Secure storage is available at the Lodge.

13) It would greatly assist College if you could remind delegates to return their keys upon their departure.

14) St Anne's is an historic campus that has natural hazards. There are control measures in place but all risks cannot be eliminated. Visitors are respectfully reminded of their responsibility to take of themselves throughout their visit.

Martin Jackson, St Anne's College Bursar

Facilities

Computer access

Wireless internet access is available in the residential rooms and in some areas of college. Residential delegates will find their individual login details in their delegate pack.

Food and drink

Breakfast will be in the college dining hall

Refreshments will be provided mid-morning and mid-afternoon outside the conference seminar rooms

Lunch will be in the college dining hall

Dinner on Thursday will be in the college dining hall

Conference Dinner on Friday will be in Foyer B in the Ruth Deech Building, close to the seminar rooms

Conference Overview

Seminar rooms 8 and 9 are in the Ruth Deech Building
Bedroom accommodation is in the Claire Palley Building

THURSDAY 5th July			
12.30 - 14.00	Arrival and registration *Lunch (in Dining Hall)*		
14.15 – 15.00	Seminar room 8		Welcome. Keynote session: Prof. Marilyn Leask, University of Bedfordshire
15.00 – 16.00	Seminar room 8		Papers 1 & 2
		Seminar room 9	Papers 3 & 4
16.00 – 16.30	*Tea break*		
16.30 – 17.30	Seminar room 8		MirandaNet debate
		Seminar room 9	Additional papers A & B
19.00	*Dinner: Dining Hall*		

FRIDAY 6th July			
08.00 – 09.00	*Breakfast: Dining Hall*		
09.30 – 10.30	Seminar room 8		Keynote session: Dr. Simon Peyton-Jones, Microsoft Research, Cambridge
10.30 – 11.30	Seminar room 8		Primary Working Group discussion
		Seminar room 9	Papers 5 & 6
11.30 – 12.00	*Coffee break*		
12.00 – 13.00	Seminar room 8		Whole conference session: Mike Harrison, TA
13.00 – 14.00	*Lunch: Dining Hall*		
14.00 – 15.00	Seminar room 8		Keynote session: Prof Steve Higgins, Durham Uinversity
15.00 – 16.00	Seminar room 8		Writing for publication Steve Kennewell (Editor, TPE journal)
		Seminar room 9	Papers 7 & 8
16.00 – 16.30	*Tea break*		
16.30 – 17.30	Seminar room 8		Papers 9 & 10
		Seminar room 9	Papers 11 & 12
17.30 – 18.30	Seminar room 8		ITTE AGM
19.30	*Conference dinner: Ruth Deech Foyer B*		

SATURDAY 7th July			
08.00 – 09.00	*Breakfast: Dining Hall*		
09.30 – 10.30	Seminar room 8		Keynote session: Prof Margaret Cox, King's College, London
10.30 – 11.00	Seminar room 8	Seminar room 9	Papers 13 & 14
11.00 – 11.30	*Coffee break*		
11.30 – 12.30	Seminar room 8		Papers 15 & 16
		Seminar room 9	Papers 17 & 18
12.30 – 13.00	Seminar room 8		Plenary and close of conference
13.00 – 14.00	*Lunch: Dining Hall*		

Conference speakers

THURSDAY 5th July	room		speaker	topic
14.15	SR 8	Keynote	Prof Marilyn Leask	Global communications
15.00	SR 8	1	Helen Boulton	New technology and literacy
15.30		2	Alison Hramiak	Smartphones in school placements
15.00	SR 9	2	Nick Page	tbc
15.30		4	Neil Stanley	Digital vs Paper? Students' views
16.00 tea				
16.30 – 17.30	SR 8	-	Christina Preston	MirandaNet debate
FRIDAY 6th July				
09.30	SR 8	Keynote	Simon Peyton-Jones	Computers at School
10.30 – 11.30	SR 8	-	James Bird & Peter Mayne	Primary Working Group Discussion
10.30	SR 9	5	Anne Scott	Blended learning in ITE
11.00		6	Rune Krumsvik	Impact of ICT on learning in class
11.30 coffee				
12.00 – 13.00	SR 8	-	Mike Harrison	View from the Teaching Agency
13.00 lunch				
14.00 – 15.00	SR 8	Keynote	Prof Steve Higgins	
15.00 – 16.00	SR 8	-	Steve Kennewell	Writing for Publication
15.00	SR 9	7	Evie Benetou	Children's attitudes to online learning
15.30	SR 9	8	Donna Gronn	Student mentoring teachers in ICT
16.00 tea				
16.30	SR 8	9	Ken Caudrelier	Media Library demonstration
17.00		10	Holley at al	Second Life science lab
16.30	SR 9	11	Christine Redman	tbc
17.00		12	Min Jou	Wireless tracking in skills learning
17.30	SR 8	-	ITTE AGM	
SATURDAY 7th July				
09.30	SR 8	Keynote	Prof Margaret Cox	Lessons from History; TEL perspective
10.30	SR 8	13	A Scott & D Gronn	ICT and ITE: Australian perspective
10.30	SR 9	14	John Sharrock	Online collaborative project
11.00 coffee				
11.30	SR 8	15	K Turvey & M Torjusson	Professional development & new tech
12.00		16	Peter Twining	VITAL update
11.30	SR 9	17	Sarah Younie	Digital Games & learning
12.00		18	Lynne Dagg and others	CPD in Programming
12.30	SR 8	Plenary	Close of conference	
13.00 lunch				

Abstracts and Outlines submitted

In alphabetical order, by author

Evie Benetou
Doctoral Researcher, Institute of Education, University of Warwick
What do children reckon about ICT use to favour it so much? Children's technology acceptance beliefs.

A group of Greek primary students practiced English learning (as a Foreign Language, EFL) online for eight months. From qualitative data collected it has been suggested that children enjoyed ICT use. Moreover, they accepted ICT use as easy because they found it *pleasant first*. The data have also pointed that the children *shared such technology beliefs with their peers*. These findings may be significant for technology developmental change at schools. Apparently they seem to imply that children *can be challenged to persist on online tasks if they firstly find the online tasks fun to do*. The fact that *children circulate and communicate such technology beliefs with their peers* seems to be important for developmental strategies.
Given the easy accessibility and the pervasiveness of the web nowadays, ICT use at schools seems inevitable. Apparently, however, the question is not whether ICT use is effective or not but what the conditions are that have to be set so ICT use may bring an impact on learning. Thus, most probably there are changes expected in ICT use but changes should be mapped first and presented next as concisely and coherently as possible for benefits to be established in education.
This workshop aims at bringing forward what children's beliefs, attitudes and behaviour about online work are and help participants reflect on that information.

Helen Boulton
Nottingham Trent University
Can New Technologies Raise Literacy Levels?

This paper is a mid-way report on a Teaching Agency funded research project. The project, led by Nottingham Trent University, is investigating whether web 2 technologies can raise levels of achievement in literacy for pupils with SEN and EAL, and engage learners who are identified as disaffected. The project has involved trainee teachers in developing the use of ICT within core subjects while working with 'expert' teachers in five schools. This paper will outline the project, and share emerging key findings from the project.

John Grey, Lynne Dagg and Julie Stewart
University of Sunderland
CPD in Python Programming

Recent government initiatives have encouraged many teachers to consider undertaking programming courses. This presentation will present some ongoing research about one programming course (using Python) which is being offered by the Department of Education at the University of Sunderland.

Recruitment to the programme was via mentors to trainees undertaking a variety of ICT Education with QTS Programmes at the University. It is significant that not all participants are mentors to students, as the message was passed between schools very quickly and the course filled up very rapidly. Enquiries about future courses are already being made.

The research considers what teachers see as the purpose of programming and how this might relate to their view of the ICT and computing curriculum and considers whether they will use the training they receive in the coming academic year. The research also considers a variety of aspects within the course, particularly the previous experience of participants, what they hope to gain from undertaking it, and other, more mundane but very useful questions for our institution of how far they travel and their view of length and timing of the course.

It is anticipated that the research will inform future CPD courses in Computing topics at the University.

Donna Gronn
Australian Catholic University, Melbourne
Children Mentoring Teachers with ICT

Donna Gronn is a senior lecturer at (ACU) in Melbourne Australia. She has over 10 years experience in teacher education and previous teaching experience in primary schools in Australia. She is an avid supporter of ICT in Education (ICTE). In this presentation Donna will share her doctoral project, a qualitative study of child to adult mentoring for professional development in the primary years of schooling.

In 2006 two schools embarked on a journey that was to change their beliefs about professional learning. They participated in a project where the children aged 9-10 years mentored their teachers in the use of technology. The children were immersed in the use of digital cameras that were new to the school and then in pairs mentored the school staff in the use of the digital cameras in their classrooms.

This model of professional development was seen as highly successful for the teachers who described the mentoring as “the best professional development they had ever attended”. An unexpected bonus of the mentoring program was the development of a broad range of skills, both academic and social, in the child mentors.

Donna Gronn and Anne Scott
Australian Catholic University
The Australian Perspective: Information Technology in Teacher Education down under

Donna Gronn and Anne Scott are senior lecturers at Australian Catholic University (ACU) in Melbourne Australia. Both have 10 years experience in teacher education and previous teaching experience in primary schools in Australia. They are combining here to share with you the latest research from Australia and how they have implemented it in their teacher education courses at ACU. Both avidly promote ICT in Education (ICTE).

Donna has been involved in the Teaching Teachers for the Future project, which was aimed at enabling all pre-service teachers to become proficient in the use of ICT in education. The project included all 39 teacher education institutions across Australia and Donna's role was as the ACU ICT Pedagogy Officer. Her work included compiling footage of 'real' teachers using technology in their classrooms and using it as a stimulus for discussion and growth amongst staff and pre-service teachers at ACU.

Anne has always seen the value of ICT in her teaching and has been a leader in the School of Education at ACU with her use of ICT in her teaching of pre-service teachers in primary literacy education. For the past 12 months, Anne and pre-service teachers her units in Victoria have had weekly web conferences as part of their class time with an experienced primary teacher and her students based in Queensland some 1098 miles away. In this presentation, Anne shares her insights about the value and limitations of the initiative for all involved in the partnership.

Together Donna and Anne will update you on what is happening with ICTE in Australian Teacher Education and share some techniques that they have found useful in developing the ICTE confidence of both staff and pre-service teachers at ACU.

Alison Hramiak
Sheffield Hallam University
'It's easier to use my phone': An exploration of the use of mobile technology to communicate course information with Trainee Teachers

The technological advantages provided by mobile technology are currently being explored in Higher Education with institutions investigating and implement new ways of reaching students through their mobile devices. This paper describes an initial pilot scheme that examined how mobile technologies, specifically 'SmartPhones©' could be used with trainee teachers on placement in schools, to disseminate course information to them, building on previous work in this field (Bryan, 2004) and to capture good practice in doing so.

After setting up a BlackBoard© (BB) site for the trainees at their request so that they had a common place to look for resources, and communicate with each other, a review at a university session revealed that this was not in fact working for them and they did not find accessing the site convenient either from home or school.
A decision was then taken to utilise their mobile phones to replace the functions that would have been covered by the BB site, as a quick survey indicated that they each had some kind of SmartPhone© that they were using every day, and would prefer to receive academic information using this rather than via the VLE. For the remainder of their course, the tutor used text and email to communicate with the trainees rather than posting announcements and resources on the BB site.
Trainees were questioned about the use of these mobile devices using surveys and a group interview at the end of the course. An initial quantitative analysis and qualitative analysis of this data using suggests that trainees strongly prefer being able to access course information and communicate with their tutor via their phone rather than through a VLE. The mobile technology provided a more convenient and accessible means to gain the information they needed, and because they could access course information when they wanted, rather than having to find a PC or laptop from which to log onto the VLE, they felt much more connected with their tutor and the other trainees who were placed in other schools geographically separated from them.
This pilot is intended to be rolled out with greater numbers of trainees in the following academic year to see if the same positive results can be obtained with more trainees in similar situations. It does, however, raise questions about the funding and time put into creating spaces on a VLE for students (by universities and their tutors), only to find that they would prefer to use their phones.

Professor, dr. philos Rune Johan Krumsvik
Department of Education, University of Bergen, Norway
Class management, digital competence and pupils' digital lifestyle

This study is carried out on request from the Ministry of Education in Norway and presents the results of follow-up research that was undertaken in the period 2009-2011 in Rogaland County among 1784 student and 606 teachers in upper secondary school. The paper focuses on if the new national curriculum for school and implementation of ICT in Norway change some of the underlying premises for class management in today's classrooms in upper secondary school. This has become particularly pressing as a result of the very high technology density in classrooms (1:1), pupils digital lifestyle and the new educational reform 'Knowledge Promotion' in school whereby digital competence is now the fifth basic competence in all subjects at all levels (stage 1-13).The objective of this study is to evaluate a ICT-project through follow-up research (using mixed methods) with special attention on class management, "off task" actvities and digital competence. The research questions are:

1. Is there a relation between the teacher's digital competence and his ability in class management, and how do students and teachers experience this relationship?
2. To what extent are there differences between students in how they use the computer to off-task activities in class, and how do students and teachers experience these differences? Findings from the study shows that 1) class management was statistically significantly related to digital competence in correlation analyses ($p<0.01$). A t-test showed that teachers with high self-reported digital competence (6) also reported high ability in class management ($M=5.28$) compared to those who reported medium high digital competence (3) ($M=4.53$) ($p<0.001$). 2) Students with high scholarly ambitions reported less off-task use of PC compared to students with lower ambitions.

Min Jou
Department of Industrial Education, National Taiwan Normal University, Taipei, Taiwan
joum@ntnu.edu.tw

Identifying student's learning difficulty of technical skills by using wireless sensor network

The learning of technical skills places a heavy premium on practical training of the learned skills and the relative capabilities developed, which requires the actual execution and performance in the students' participations. For the purpose of allowing the effects produced by the instructions given to be amplified, such means of measurement as questionnaires and interviews have conventionally been administered in order to obtain what is then supposedly a "holistic" perspective on the teaching approach employed. Although there are times where immediate interventions are necessary when it comes to the learning of technical skills so that corrections can be made to avoid mistakes from being made on a repeated basis, with consistent quality of learning effects being retained. The current study has developed a wireless sensing system for the purpose of error identification and correction, with systematic authenticity enabled with the same technique used in welding. The results of the study have indicated such a sensing system to have been effective in reflecting upon detections it has made that had ranged from erroneous welding processes, speeds, angles, and to the procedures involved. This might serve as a great tool for instructors as they provide students with assistance and/or corrections in the students' learning processes. The system can also be further integrated with "e-portfolio" to generate an automatic learning experience of technical skills, and so to make such learning and training experiences to be more adaptive to each of the student's individual learning needs.

Anne Scott
Australian Catholic University, Melbourne
Australian Pre-service Teachers Flip Over *Flip Teaching*

Anne Scott is a senior lecturer at (Melbourne campus) with 10 years experience in teacher education and previous teaching experience in primary schools in Australia. Anne continually seeks to use IT to cater for the diverse learning needs of primary pre-service teachers studying literacy education. In this presentation, Anne will share her positive and negative experiences of her first attempts with *Flip Teaching* with a cohort of 200 pre-service teachers in a compulsory literacy education unit.

Flip Teaching is a form of blended learning which enables students to explore specific content designed by the teacher using a lecture-style presentation online and to complete tasks to show their comprehension of the content prior to attending face-to-face classes. During face-to-face classes, concepts are explored more deeply. The flexible mode of delivery appeals to students and there have been reports of increased levels of engagement from students. However, there is limited research on its implementation and effectiveness in terms of learning outcomes in primary pre-service teacher education courses.

In this presentation, Anne reports on pre-service teachers' perceptions of the use of Flip Teaching sessions to replace six of twelve weekly face-to-face lectures. In particular, she identifies the affordances and limitations of Flip Teaching sessions in terms of pre-service teachers' levels of engagement, learning outcomes, and influence on pre-service teachers' perceptions about using technology in their own teaching in the future.

John Sharrock & Christine Smith
Liverpool Hope University
Virtual School: Engaging a whole cohort with collaborative online learning

Over the last two academic years, the whole cohort of the PGCE Secondary course at Liverpool Hope University (circa 260 students in each year) have engaged with a collaborative online project, working in small groups, to reflect their engagement with the generic part of the course.

The 2010/11 pilot identified many issues but proved sufficiently worthwhile to encourage the further development of this project. A reworked version was implemented in 2011/12 and feedback from students was overwhelmingly positive.

This session will outline the project and explain the difficulties that were faced in its implementation and how they were overcome. It will then discuss an analysis of feedback from the students, through a questionnaire and a number of individual interviews identifying the successes of the model and any issues which need to be addressed in the future.

Neil Stanley

Liverpool John Moores University

What they, really, really want.

Tutors are being encouraged to place all support materials on institutional VLEs, not least to save photocopying costs. However, in a world where they cough up up to £9k a year, students may well feel entitled to vast amounts of paper. This session will report on the findings from a project where students where asked what they felt they wanted/expected (by survey) and where some were involved in focus groups to consider some practical examples of lecture handouts. A future handouts model (currently in use by one of the researchers and being adopted by the other) will be presented.

Sarah Younie
De Montfort University

Digital Games Based Learning: more than just toys?

This paper critically assesses the research on digital games and the extent to which there is evidence that this technology can enhance learning. The paper examines theories that help us understand the appeal of gaming, and draws on psychological theories of play, alongside motivational and arousal theories to explain how gaming activities sustain interest for long periods of time. This is set within the context of the research on gaming and current evidence base about games based learning. The paper considers applications to classroom practice and barriers to more widespread implementation.

Notes page

Delegate list

Jan Barnes	Swansea Metropolitan University
Evie Benetou	University of Warwick
James Bird	Oxford Brookes University
Helen Boulton	Nottingham Trent University
Ken Caudrelier	Visual Learning
Andrew Connell	Keele University
Linda Cooper	University of Chichester
Margaret Cox	King's College London
Andrew Csizmadia	Newman University College
Lynne Dagg	University of Sunderland
Anita Gebarowicz	Manchester Metropolitan University
John Grey	University of Sunderland
Donna Gronn	Australian Catholic University
Mike Harrison	Teaching Agency
Chris Higgins	Oxford Brookes University
Steve Higgins	Durham University
Mike Hobbs	Anglia Ruskin University
Debbie Holley	Anglia Ruskin University
Philip Howlett	Anglia Ruskin University
Alison Hramiak	Sheffield Hallam University
Libby Jared	University of Cambridge
Min Jou	National Taiwan Normal University
Steve Kennewell	Swansea Metropolitan University
Rune Krumsvik	University of Bergen, Norway
Michael Lansley	University of Chichester
Michael Lawrence	University of Sunderland
Stephen Lea	Canterbury Christ Church University

continued ...

delegates continued ...

Marilyn Leask	University of Bedfordshire
Peter Mayne	University of Worcester
Margaret Meredith	York St John University
Jane Morris	University of Cumbria
Maurice Nyangon	University of Greenwich
Nick Page	Nottingham Trent University
Mandy Peace	Swansea Metropolitan University
Simon Peyton-Jones	Microsoft Research, Cambridge
Christina Preston	University of Bedfordshire
Christine Redman	Melbourne Graduate School of Education
Lynn Roberts	Institute of Education
Dianne Robinson	Sydney, Australia
Anne Scott	Australian Catholic University
John Sharrock	Liverpool Hope University
Christine Smith	Liverpool Hope University
Neil Stanley	Liverpool John Moores University
Julie Stewart	University of Sunderland
Richard Taylor	International Baccalaureate
Martin Torjussen	University of Brighton
Keith Turvey	University of Brighton
Peter Twining	The Open University (Vital)
Richard Vickery	Liverpool John Moores University
Kate Watson	University of Exeter
Sarah Younie	De Montfort University

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Conference programme and abstracts

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