Kaleidoscope Postgraduate Conference 2007
University of Cambridge

Abstracts

University of Cambridge
Education Policy Reform in Latin America: The Case of the Escuelas 2001 program in San Luis, Argentina
Alejandro Jorge Ganimian

This presentation will report on a pilot study of the process of education policy reform behind the introduction of a government initiative introducing publicly financed—privately managed schools in San Luis, Argentina. The pilot was conducted in Argentina in March 2007. The study seeks to understand why the government ultimately decided to discontinue the program, in spite of: the long tenures of the Governor and the Minister of Education, a quiescent teacher union, the eventual enthusiasm of civil society, the support of a team of international experts, the good performance of the schools.

This study seeks to understand the relation between the actions and choices of reformers and their opponents in San Luis and the termination of the program. It uses Grindle's strategic choice approach to understand whether reformers made inadequate choices in trying to muster support for the program, whether opponents made successful choices in blocking the program, or whether in fact both of these statements are in fact valid. In order to test these three working hypotheses, this pilot relies on interviews with those involved in the reform process, and compares the information obtained in these interviews with government documents, newspaper articles, and other data, for purposes of triangulation. The Gates Cambridge Trust provided the funding for this study, and Prof. Madeleine M. Arnot and Prof. John Beck supervised it.

This pilot study seems to provide some grounding to support the three hypotheses offered above, but invites further research into the role of interests and institutions in constraining the choices that both sides of the reform made in San Luis.

University of Bath
The Equity of Education in Mexico: A Study of Lower-Secondary Schools from the School Effectiveness Approach
Andres Sandoval Hernandez

The paper is the research design of a study concerned to identify, theoretically justify and test in multi-level models variables and inequity patterns of the lower-secondary education in Mexico. The approach is one which sees developments in school effectiveness as having reached a new stage in which the earlier common sense identification of variables used in statistical modelling has now given way to a more theoretically informed approach to the variables used in school effectiveness models. The paper shows reference and theoretical frameworks, a literature review, objectives, a description of the data and methodology to be used and the expected outcomes.

Open University

Intermediate Steps in Software: Promotes Conceptual Knowledge?
Anesa Hosein

University students are often taught to use commercial software related to their courses such as SPSS for psychology statistics, Palisade for business management, and MathCad for mathematics. Whilst commercial software allows the student to employ software to only obtain the desired answer, there is uncertainty where the software helps to promote the conceptual understanding, as this is often dependent on the lecturer's teaching approaches. Some software, particularly in the mathematical domain, allow student's to see the intermediate steps and/or interact at each of these step, before obtaining the desired answer. These software with/without intermediate software can be classified into three types: black-box, glass-box and open-box.

This research aims to investigate whether these three types of software may promote the conceptual and procedural knowledge of the student when they use the same teaching approach. The paper presents a quasi-experimental designed pilot study of 6 students learning expected values each using the three types of 'software'. The three types of software were programmed in Excel and were renamed as calculators.

Using a web-conferencing remote observation method (through webcams and application sharing), students were observed using the software by following a quasi-experimental design. Further discussions are made on the implications of this study for another study where each student is learning linear programming using only one of the calculators. The preliminary results from this study are also presented.

University of Cambridge

Between streets and schools: exploring the process of educational inclusion of 'street children' in Brazil
Cleonice Puggian

This research investigates the process of educational re-inclusion of dropout students known as "street children", analyzing through their own perspectives the reasons for their return to mainstream schools and its relation to the support of pedagogical activities promoted by NGOs in Rio de Janeiro, Brazil. Data was collected through participant observation, ethnographic interviews, photographs, drawings, videos, audio recording and documents from April 2005 to October 2006. Using a grounded theory approach to assist with data analysis, this research brings to light some of the main issues faced by adolescents, educators and teachers in their lives between streets and schools. Firstly it will present students' perspectives about their own processes of educational and social exclusion, discussing the relationship between their disengagement from schools and engagement in other activities, such as life on the streets, drug dealing and crime. Secondly, it will offer an account on how students manage their own lives and build strategies to exit the streets. Thirdly, it intends to describe some alternatives found by students after leaving the streets, critically analysing the nature of educational and social support offered to children who seek shelter, schooling and work. Finally, it offers insights to alternative educational practices and public policy, bringing the voice of excluded students into the political and educational debate in Brazil and Latin America.

University of Cambridge

Exploring How Collaboration Works: the Case of Teachers and Teaching Assistants
Cristina Devecchi

The study onto which this presentation is based was an ethnographic exploration of the notion of collaborative support, namely how teachers and teaching assistants (TAs) work together to support each other. The study was conducted in a secondary school and focused on how teachers and TAs in general and four teams in particular collaborated to support the inclusion of the children and how the school supported them in their task. While there is research on co-teaching, the issue of adults with different status and teaching qualifications has not been widely explored. The research available on TAs tends to be descriptive and prescriptive, but so far it has lacked conceptualisation. The doctoral study therefore aimed to describe and conceptualise their collaboration and support.

On the basis of the findings, I devised two conceptual models for understanding collaboration. In the first model, I argued that collaboration occurs when people are able to meet each other's needs, interests and expectations and that it is effective to solve problems and resolve dilemmas about practice. In the second, I argued that for the first model to be effective the collaborators need to share a number of distinct forms of knowledge, and by doing so the collaborators redefine channels of power, authority and control by carving new spaces of autonomy and professional responsibility which in turn change their views about each other's roles and status. In this presentation I aim to show how the models work based on data collected during fieldwork through classroom observations and individual interviews, but also to show how the models can be used to understand any form of collaboration including the use of collaboration as a methodological approach to research.

University of Cambridge

Equality in Post-Graduate Study
Dino Sossi

The effects of globalisation have heavily impacted post-graduate education. This phenomenon is especially noticeable in terms of the highly diverse, internationally-oriented, composition of the student body. This seminar will examine the new reality of post-graduate education in the context of the concept of equality. More specifically, it will discuss the current model of post-graduate education and how it relates to varying definitions of equality. Is the current model sufficient in terms of guaranteeing equality for students? Or does there need to be a fundamental reassessment of our programs and rethinking of their delivery? The seminar will be contextualized by the presenter's own experiences as an international student and post-graduate researcher.

University of Cambridge

But They All Said So! Resisting the Allure of Frequency Counts When Analysing Qualitative Data: A Young Researcher's Experience of Analysing Narrative Data on Teacher Recruitment
Elbereth Wentzel

In this presentation I will discuss the analysis of qualitative data, and the allure that frequency counts hold for inexperienced researchers unfamiliar with the analysis and interpretation of qualitative data. I will explore the limitations of frequency counts and investigate alternative approaches to analysing narrative data.

The presentation will draw on my own experience as a researcher conducting my first qualitative study, which consisted of interviewing 24 students enrolled in Initial Professional

Education of Teachers (IPET) programmes at four urban universities in South Africa. Based on a grounded approach, the study aimed to collect and analyse narrative data to generate a hypothesis as to the factors that influence students' decisions to enrol in an IPET-programme in an attempt to comprehend decreased enrolment rates, and ultimately inform future recruitment initiatives.

Narrative data was collected and analysed, and I found that I was often tempted to utilise frequency counts to identify categories of factors across a varied sample of students or stress the importance of each category of factors in the decision making process. Although frequency counts can be useful, this type of analysis alone would have masked certain central findings, and provided a misrepresentation of the factors students identified as important in their decision making process.

Instead, as I will demonstrate in the presentation, alternative ways of identifying what I labelled dominant or negligible and positive or negative factors that influenced students' decision to enrol in an IPET-programme had to be utilised to ensure a valid interpretation of the narrative data.

University of Cambridge
Patterns of Physics Problem-Solving among Secondary School Students from the Perspective of Metacognition
Fatin Aliah Phang binti Abdullah

Previous studies in Physics problem-solving suggest that there are differences between expert and novice Physics problem-solvers. However, it is arguable that many of these studies are based on activities that should not be considered as real problem-solving. The definition of a real problem wasn't taken into account when selecting the problem-solvers. Consequently, there is a limited body of research into fundamental aspects of problem-solving among the so-called 'novices' available to inform the design of instruction to develop problem-solving ability among 'novices'. Recent work suggests that metacognitive skills play a vital role in problem-solving. Yet, there are only a few studies looking specifically into the role of metacognitive skills in Physics problem-solving, especially among the secondary school students. This research attempts to investigate the patterns of Physics problem-solving among Key Stage 4 students through the lens of metacognition using Grounded Theory. 148 students from 5 schools were given a Physics Problems Test (PhyPT) consists of 6-8 Physics 'problems'. Later, 30 students were selected as theoretical sample to undergo a session of individual problem-solving using thinking-aloud and observation, followed by retrospective semi-structured interviews. A few more problems were constructed to match the level of difficulty and conceptual understanding. The analysis of the thinking-aloud protocols, using constant comparative method, was supported by the analyses of interviews, video observations and answer sheets. The saturated patterns suggest that students show different approaches when facing easy questions and difficult problems. The easy-question-pattern is quite consistent and 'expert-like' while more metacognitive skills are shown in the difficult-problem-patterns.

University of Cambridge
The Mathematics Content Knowledge of Beginning Teachers: The Case of Amy
Fay Turner

The knowledge quartet framework (KQ) is a tool for the identification of mathematics content knowledge as revealed through the practice of trainee teachers. The KQ framework was developed from grounded research analysing 24 mathematics lessons of trainee teachers. The 18 codes identified were subsumed under four overarching categories to give the KQ framework.

I report on some work from my PhD study, in which the framework has been used with a group of beginning elementary school teachers. In this study the teachers participate as co-learners (Wagner, 1997) in developing their teaching through reflection using the KQ. The findings reported here are from the first two years of a four year study. These findings concern the case of Amy in relation to just one dimension of the KQ: foundation knowledge.

The findings presented here will inform one of the four case studies of my thesis. After two of the four years in which I will be working with Amy, some themes seem to be emerging. Amy's reflections focusing on the foundation dimension of the KQ would seem to have facilitated some development in her understanding of herself as a teacher of mathematics. She has recognised the importance of teaching in a way that is consistent with her beliefs about mathematics and mathematics teaching. Amy also seems to think more explicitly about the theory behind her teaching practices e.g. using knowledge of the pre-requisites for counting to plan her lesson.

University of Cambridge

Negotiating Educational Decisions in the Context of Poverty: A Perspective from Rural Kenyan Women
Fibian Kavulani Lukalo

The economic decline of sub-Saharan Africa since the 1990s has exacerbated poverty and stunted educational provision. Women's limited control over resources and low educational levels continue to restrict their access to knowledge and information. Women's predicaments are intensified in rural areas where educational provision is lower. Educational statistics from Kenya show that rural areas continue to lag behind in children's school enrolment and completion rates. In these circumstances, children's educational opportunities are (in)directly influenced by family choices concerning school attendance and parental involvement. Many of these out-of-school children are often girls from poor families. Some studies have corroborated that girls' access to education has been hampered by poverty-related factors. Within this educational debate, intergenerational transmission of poverty seems relevant concept because of the relative powerlessness women experience in and across families. In this way, educational decisions made or not made for children living in rural areas have long-term effects and it would be important to understand mothers' decision construction in families. This paper presents some views concerning educational decisions from mothers living in rural Kenya. As part of preliminary data on poverty and education, the use of life narratives is a first step into gathering data in this area. I propose that the educational decision-making remains significant in either interrupting or breaking poverty transmission across generations.

Open University

Nature Trails and Geocaches: Exploring the Role of Location-Aware Mobile Devices in Informal Learning
Gill Clough

Recent technology developments have delivered mobile devices such as PDAs and Smartphones that are increasingly powerful. These new devices combine mobile connectivity with location awareness, stills and video image capture and replay alongside and the usual diary, calendar and note-taking applications. This presentation describes the results of a pilot study that adapted a Nature Trail for delivery via such GPS-enabled PDAs in order to explore into the ways in which location awareness and situated access to contextual information can support informal learners.

This study highlighted the importance of motivation on the outcomes of an informal learning activity and revealed the role of situated access to contextual information in providing a focus. Collaboration was an influential factor, with face-to-face collaboration enhancing the immediate experience, and remote collaboration supporting the development of ideas and the pooling of knowledge. Participants were encouraged to form an on-line community via a group blog in order to extend the information in the Nature Trail through observation and research, however although some participants engaged with the online community others did not. These findings influenced the methods chosen for the main study into informal mobile learning. The main study will use a pre-existing community of mobile device users, Geocachers, to seek insights into the processes that influence the evolution of the community based around a location aware activity, and the informal learning opportunities that it supports.

University of Bath

The student voice as a political indicator of sense of citizenship
Hugo Manson

This presentation, based on a nearly-completed PhD thesis titled *Future political possibility: Sense of citizenship of pre-first-time voters in New Zealand in the early 21st century*, focuses on an aspect of the methodology used in the fieldwork stage of the thesis, the voice as a political indicator in the narrative of future citizens. More than one hundred extended interviews were conducted with, and by, students from five New Zealand secondary schools documenting the attitudes to political involvement, and the political understanding, of 14- and 17-year-olds. The findings of the research reveal an instinctive political sense in both age groups, and a relatively sophisticated awareness of global political issues. At the same time there is much evidence of early disenchantment with, and ignorance of, political processes as the students perceive them at a national level. There is evidence, too, of a lack of practical involvement in formal or informal political processes in their own lives, a lack of a sense of empowered citizenship within their own communities of interest. Yet there is a strong sense of the links between global, national and their own local circumstances. An indicator within the evidence, is the voices themselves of the students, the manner of expression of what they have to say. This evidence in sound is produced to reinforce the proposition that, far from being uninterested, the students interviewed have a strong sense of their current, often negative, reality as citizens of the various communities surrounding them.

Institute of Education

The constituents and challenges of effectively educating vulnerable young people in urban Cambodia
I-Hsuan Cheng

Having regard to the socio-cultural, economic and educational vulnerability of young people in urban Cambodia, this presentation is an attempt to discuss the current findings of the constituents and challenges of providing NGOs' intervention in vocational education for employment and empowerment. More precisely, to answer the core research question about what constitutes effectiveness (in managerial and pedagogic terms) of NGOs' intervention in vocational education for employment and empowerment of vulnerable young people in the Cambodian urban context.

NGOs' intervention has been encouraged by the state's failure to provide adequate access and quality of educational services. Questions about the unknown managerial/pedagogic components of NGOs in response to the specific circumstances in Cambodia are thus raised and need to be answered by virtue of empirical evidence. 10 NGOs located in 4 cities are selected for a qualitative, multiple-case study, with direct observation, participatory

observation, semi-structured interview and documentary collection being applied in two periods of fieldworks (the first: 5 January-25 March 2006, and its follow-up: 10 January-25 March 2007).

University of Cambridge

Gathering Sensitive Information From Early-Adolescents: A participant centred study of dialogic, audiovisual and visual 'pupil friendly' methods
Jenny Symonds

An increasing emphasis on pupil voice by education researchers Rudduck, MacBeath, Arnot McIntyre, Reay and others, exemplifies the positive effects of enabling dialogue between pupils and educational practitioners. Recent work by Fielding and Bragg (2003) extends this to involving pupils in the research process within schools. Consultation with pupils on the effectiveness of research methods is a constructive but often underused utensil in the researcher's tool kit: one that begs for application, especially in the circumstance of extracting sensitive information from adolescents. To inform an examination of potential declines in Y7 pupil's attitudes and behaviour following their move to secondary school, as found by Hargreaves and Galton (2002), a short study involved pupils as researchers to investigate their anxieties and successes in sharing information about the psychosocial processes of becoming a young-adult. Pupils tested and evaluated the methods of pupil generated research questions, pupil-to-pupil interview, self-interview, stimulated video recall, projective tests, attitudinal maps and video presentations. Through triangulating pupils' suppositions and actual experiences of using the methods, it was revealed that a balance between familiarity and anonymity best facilitated the expression of sensitive information. The current presentation will outline the findings from the study and discuss the validity oriented implications of providing pupils with an adequate mixture of knowledge and privacy in research.

University of Cambridge

A case study of metacognition in reading comprehension (L2) amongst South Asian bilinguals
Jie Deng

This study aims to investigate the possible differences of metacognition in reading comprehension between monoliterate and biliterate bilingual children. It explored five competent 10-year-old South Asian bilingual children's comprehension monitoring and metacognitive reading strategies by examining their syntactic awareness, phonological awareness, and the relationship between the awareness and metacognitive reading strategies. Neale Analysis of Reading Ability was used to obtain an accurate assessment of the children's reading ability. Interviews, questionnaires, retelling and think-aloud procedures were employed to explore the children's comprehension monitoring and metacognitive reading strategies.

University of Cambridge

The Challenges and Difficulties of Citizenship Education in Japan
Jiro Hasumi

This paper is to address the questions as to what justification is embedded in the Japanese policy of citizenship education?; what does constitute the justification for compulsory citizenship education in Japan?; and what conception of citizenship (civic/political competences) are entailed in citizenship education policy in Japan? In answering these questions, this paper examines whether or not the following two typical characterisations of

the current Japanese practice of citizenship education is correct: one is its totalitarian, fascist, or even feudalistic nature (Herzog 1993, Willis 2002, Heater 2004), and the other is its Oriental tradition (McVeigh 1998, Willis 2002, Heater 2004). Its history being scrutinised, the justification for citizenship education in Japan after World War II has gradually shifted from top-down democratisation to civic republicanism—either case is what I call 'institutionalism.' In addition, Japanese citizenship education has swayed between progressivism and knowledge-based education, and between Deweyan pragmatism and neo-liberalism. Moreover, Japan is still struggling to reach an agreement in citizenship education between Confucian communitarian moralism and modern liberal individualism. All these imply that there are enormous difficulties in defining an appropriate philosophical equilibrium in citizenship education in a context.

University of Cambridge

Delivering Financial Education in the Workplace
John Comerford

As American workers transition from the organizational provision of pensions to personal responsibility for making their own retirement related financial decisions, a new focus has developed on pension education in the workplace. While there has been much literature written about the financial literacy of American workers and the differences in behavioural characteristics among different racial/gender groups, little has been written about these workers themselves, viewed from their own perspective. Most studies have been quantitative, focusing on empirical data, rather than trying to understand the real educational needs of workers; particularly lower income workers. With recent legislation in the United States requiring pension sponsors to deliver some form of pension education, the time is right for a subjectivist phenomenological study of pension education. This presentation examines the process of how pension education can best be created and delivered in the workplace by exploring the financial needs of lower income workers through their own eyes. Mainly through the use of one on one interviews, this presentation develops the case for personalizing pension education based on social, cultural, ethnic, and religious values, rather than delivering a 'one size fits all' package based on age, salary or other established demographic models.

University of Cambridge

Refining and evaluating the sensitivity of the mathematics-related beliefs questionnaire (MRBQ) to nationality, gender and age
Jose Manuel Diego Mantecon

Despite the important role that beliefs play in the learning of mathematics (Mason, 2003), there is still much ambiguity about the influence of critical factors such as socio-cultural context, age and gender on student mathematics beliefs. This fuzzy understanding of the nature of beliefs may be due to two issues: firstly, there have been almost no studies which considered the mutual influence of these three factors; secondly, many of the studies in the literature fail to measure beliefs, as they focus on identifying single beliefs rather than on belief systems (Diego-Mantecón, 2006). In order to tackle the second issue, Op't Eynde and De Corte (2003) developed an original instrument to provide a theoretically warranted and comprehensive measure of students' mathematics-related beliefs. The MRBQ evaluated with Flemish students yielded four scales, each reflecting a different construct. However, only two of the scales achieved satisfactory levels of reliability, with no factor analytic attempt made to determine any subscales. Moreover, the instrument was developed for and evaluated on Flemish students with, as yet, no evidence to suggest that it is transferable to other contexts. The purpose of me study was to refine the MRBQ for an English and Spanish audience and consequently to evaluate its sensitivity to variables such as student age, gender and

nationality. The refined MRBQ has yielded four conceptually different and reliable scales and ten subscales. The identification of this common structure of English and Spanish students' mathematics beliefs has allowed me to highlight a number of culturally-, age- and gender-related differences.

University of Cambridge

An investigation of the interplay between gender, power and sexuality and their relation to education among urban unmarried adolescent girls in India
Juhi Sutaria

This paper is a part of the ongoing doctoral research that seeks to explore the relation between gender, power and sexuality among urban unmarried adolescent girls belonging to lower socio-economic class in India. The research also aims to examine how education influences the construction of gender, power and sexuality among these girls. This paper critically analyses the literature from India and the West on the subject of gender, power and sexuality of adolescent girls. A number of studies done in the West have employed qualitative methodologies to understand the meanings of sexuality through the eyes of young/adolescent girls. By highlighting the important role played by gendered power relations on the sexual attitudes and behaviours of adolescent girls, these studies reveal a crucial factor that hinders adolescent girls' attempts to engage in safe sexual behaviours. These studies also inform the kind of research which needs to be done in India. Most of the studies on adolescent girls' sexuality in India are a type of Knowledge, Attitude, Behaviour and Practice (KABP) surveys. This paper contends that these kinds of surveys fail to capture the different meanings that young people attach to their gender and sexuality. It presents the gaps in the Indian literature in this field and argues that there is a need for studies that explore the interplay between gendered power relations and sexuality among adolescent girls in India. By reviewing the existing literature on the role of schooling on female empowerment (autonomy) in India, the paper argues that there is a need for in-depth research in India, which explores the relation between education and the construction of gender and sexual identity among adolescent girls.

University of Cambridge

Studies on Well Motivated Japanese Learners of English at University Level
Kazuro Shibuya

The presentation is on my PhD research which attempts to examine foreign language learners' motivation, focusing on Japanese learners who are well motivated to learn English at university. The goal of the research is to identify characteristics of motivated learners at university: how they are different from the less motivated learners, and processes in which they became motivated learners of English in Japanese educational environment. To this end, the study examines and analyses not only the respondents' present motivational experiences but also their past learning experiences, based on quantitative and qualitative data. The outline and some findings of the research will be presented in the presentation.

University of Oxford

Knowledge and Performance of Small Talk by Japanese Users of English
Kentei Takaya

This research investigates knowledge and performance of small talk by Japanese users of English who are enrolled in higher education in England. This study is important because small talk is the oil that enables people to interact without friction in many everyday situations. But because of cross-cultural differences between Eastern societies and Western

ones, the mastery of small talk is no easy task for Japanese students in England. Nevertheless, like most things in life, it can be learned, but only if we first gather more information about the challenges it poses to Japanese users of English. The description of Japanese students' understanding of small talk is important from the point of view of second language education in finding out what needs to be taught in a language classroom.

Loughborough University

Improving Attitudes towards Statistics
Marijn Waaijer

The number of students that are choosing to study statistics at university is dropping. There has been strong anecdotal evidence that students develop some sort of antipathy towards statistics. Furthermore there is hearsay evidence that expectations of statistics at university are out of line with experiences at A-level.

This study will investigate the teaching and learning of statistics in England. Which conceptions of statistics do students and teachers have and what are their attitudes towards statistics? What are the differences between teaching and learning at A-level and university and do conceptions and attitudes change? By means of interviews with teachers and students, surveys at schools and analysis of curriculum and textbooks we aim to identify the factors that influence the attitudes towards statistics, to identify more and less effective ways of teaching statistics and to provide suggestions for improvements in the way statistics is being delivered, both at A-level as university.

University of Cambridge

Teaching Thinking Strategies: A Case Study of a Kazakhstani School
Marzhan Srymova

This presentation focuses on the case study of a Kazakhstani school, which I decided to carry out to understand what teachers in that school do to develop/teach children thinking. A review of literature showed disagreement among educationalists on how teachers might contribute to thinking development and how effective their current practices were. There are different Teaching Thinking approaches proposed though none of them has been proved to be effective yet. One of the criticisms was that teachers currently develop children's thinking, so these approaches do not contribute much to improvement of teaching practices. This drove me to explore the field to understand if teachers develop thinking and, if so, how they do it. The research aim was to find out what activities teachers offered at their lessons, what educational goals they set when planning and conducting lessons, how consistent their practices were with the Teaching Thinking approaches and what were the constraints limiting their ability to contribute more to development of children's thinking. This exploratory case study was carried out in a critical realist tradition involving observation of lessons and post-lesson interviews with teachers. The school was chosen purposefully due to its excellent academic performance and best teaching practices. The participants included five teachers who were observed teaching two different classes of 13-year-olds. The presentation will discuss the theoretical problem, research questions and methods, the research process and report preliminary findings and their possible explanations.

University of Cambridge

The Effect of The Graphical Features of The Arabic Text on The Reading Accuracy of The Jordanian Dyslexics As Compared to The Non dyslexic
Muna Amr

This study focuses on the ways in which graphic features of written and printed Arabic affect the reading accuracy skill among Jordanian dyslexic students. It aims at answering two main questions; how the similarities of Arabic letters and letter shape variations affect the dyslexics reading accuracy as compared to non dyslexics. Also how teachers of dyslexic and non dyslexic students cope with these graphical aspects of the Arabic text. Another question that has resulted from the field research concerns the teachers' views on the notion of dyslexia and the learning difficulties.

A combination of mixed quantitative and qualitative methods has been employed to address the research questions. Sixty students have been tested using four reading tasks that are designed for the sake of the study. Also, 40 teachers of dyslexic and non dyslexic students have been interviewed. The data have been analysed in three phases; first, the 'error analysis' where the students' errors from the reading tasks have been analysed, categorised and quantified. Second, the quantitative analysis which used to draw a comparison between the dyslexic and non dyslexic groups about the effect of the graphical features in their reading accuracy. Third, the qualitative analysis to analyse the teachers' interviews. The preliminary findings show that the dyslexic group have significantly more errors related to the graphical features of the Arabic text than the non dyslexic students.

University of Cambridge

Using Governmentality as a Conceptual Tool in Education Policy Research
Olena Fimyar

This paper analyses how governmentality as a conceptual tool is used in empirical social science research and, in particular, in education policy studies. The discussion commences with a cursory examination of the main definitions of governmentality first put forward by Foucault (1991) and further developed (in connection to liberal states) by Dean (1999), Gordon (1991), Larner and Walters (2004), Lemke (2000), and Rose (1996, 1999). It is maintained that in these diverse studies governmentality does not constitute a closed theoretical framework, but rather is operationalised as a generic analytical tool. The perception of governmentality in education studies is discussed in the second part of the paper. Education research, which up until now has been more influenced by the methodological implications of Foucault's works rather than the conceptual, has shown evolving interest in governmentality. This tendency is exemplified in selected works by Ball (1990, 1994), Peters (2001a, 2001b, 2003) and Tikly (2003), the last even extended the application of governmentality to illiberal states. Taking Tikly's work as a point of reference for my study in progress, I attempt to apply the concept of governmentality towards an understanding of policy-making, as technologies of government, in post-communist Ukraine. The possibilities and limitations of this theoretical endeavour are presented in the final part of the paper.

University of Cambridge

What is Educational about Educational Research? Perspectives on Pragmatic Validity
Ozgur Bolat

Educational researchers usually and rightly conduct research on what interests them with little or no interest for the practitioners. The ultimate step becomes publishing the research findings. However, this way of conducting research does not always directly improve educational practices at schools. In this paper, I argue that the ultimate step for conducting

research should be to help practitioners improve their practice. The educational research should be educational, that is, teaching, guiding and informing practitioners. It should have what is called pragmatic validity. This is an important paradigm shift in educational research because the starting point for research becomes the needs of practitioners and the end point the improvement of practice. In my own research, I have followed such a path and am receiving positive feedback.

University of Leeds

Who Succeeds in Mathematics? Theoretical Considerations, Caribbean perspectives
Patricia George

Within the Caribbean there has been a perception that students are 'underachieving' in mathematics. This assessment has been made based in part on the proportion of students who are successful in mathematics compared to other subjects in external examinations. My study sought to investigate this notion, using secondary schools in Antigua and Barbuda as a case study. Statistical data showed that student performance in the examinations was on average lower in mathematics than across all subjects, including English Language. However this finding was not 'true' of students across all school-types. In particular, the mathematics performance of students in single-sex schools was not far different from their performances in other subjects, and was markedly different from that of students in mixed schools. This finding concerning school-type suggested at what may be an underlying factor in students' mathematics performance, as school-type in the Caribbean is predicated on students' home backgrounds. Yet, there has long been an argument that mathematics is learnt at school so that home background is less of a factor here than in other more discursive subjects. In this presentation I would like to explore this idea using a Bourdieuian theoretical framework. There is a question of how to operationalise, for example, cultural capital, in the context of the study. Quantitative means of operationalisation do not always satisfactorily get at what the 'it' is that differentially awards students success or not in mathematics. Qualitative means of operationalisation provide a potentially more useful strategy within the context of the study.

University of Oxford

Rethinking relationships between students and teachers in English secondary schools: negotiating youth and adult identities in the classroom
Patrick Alexander

This paper will deal with the issue of how contemporary notions of adolescent and adult identity are constructed in relation to one another in English secondary schools. In particular I ask how these identities are negotiated and mediated through student-teacher relationships, and, in turn, what implications this may have for teaching and learning.

Drawing principally on theories of culture and identity developed in social anthropology and sociology, I attempt to problematise traditional notions of adolescence merely as a developmental stage in a person's growth towards stable "identity achievement" in adulthood. Instead, both adult and adolescent identities are constantly being negotiated and renegotiated in relation to one another. Building on a theoretical view of culture as a continuum or flow (Hannerz, 1997), in which both adults and adolescents are active meaning makers in a wider cultural world (Kehily and Swann, 2003), I argue that adults and young people should be seen to share commonalities of cultural experience that transcend traditional ideas of "adolescence" and "adulthood". Perhaps now more than ever, adults "emerging adults" and adolescents negotiate identities that intersect and overlap in terms of the cultural representations – in the media, in consumption habits, in language – that they use to define who they are (Arnett, 2004).

Institute of Education

School resources and student achievement: worldwide causal links and methodological issues
Paulo A. Meyer M. Nascimento

The presentation will discuss the potential relationship between additional resources and variations in student achievement. The focus will be on the controversies and methodological issues raised in the Education Production Function literature since 1966, when the Coleman Report concluded that educational inequalities in the US were explained mainly by differences in family background. This statement has been ever since backed up by Eric Hanushek, whose several literature reviews and own OLS estimates systematically lead to the same conclusion – both for the US and abroad. In recent cross-country analyses, Ludger Woessmann links international differences in attainment to institutional differences across educational systems – not to resourcing levels. In opposite direction, Stephen Heyneman and William Loxley tried to demonstrate in the 1980's that, at least for low income countries, school factors seemed to outweigh family characteristics on the determination of students' outcomes – although other authors show evidence that such a phenomenon may have existed only during a limited period of the 20th Century. In the 1990's, meta-analyses raised the argument that school resources were sufficiently significative to be regarded as pedagogically important. The turn of the Century witnessed a new movement: the recognition that endogenous determination of resource allocation is a substantial methodological issue. Therefore, efforts have been made to incorporate the decision-making processes that involve families, schools and policy-makers in economic models. This implies changes in research designs that may affect the direction of future policy advices patronised by international development and educational organisations – as will be discussed in the presentation.

University of Cambridge

Defending Libertarianism: A Thinking Point for Educationalists
Rebecca Greeves

Before we can make decisions about how education ought to be provided, we need to be clear about the proper relationship between the individual and society, and between the state and citizen. How much we value individual freedom, and how far we believe the state's role should extend, will have important implications for how we structure our education system. This paper seeks to defend libertarianism by presenting two major arguments in its favour and defending it against communitarian challenges. It is argued that the most desirable state is that which is minimal and neutral, and that any system of education ought to be in keeping with this. It is hoped that this paper will act as a springboard for discussion of the desirability of a libertarian society and the possibilities for setting up a libertarian education system.

Loughborough University

Investigation into How Physics Students Learn Mathematics
Ria Symonds

This paper reports on a study which sought to examine, in detail, the methods that Physics students adopt when learning mathematics. A questionnaire was administered to the 2006/7 cohort of first year Physics students during the first week of the new academic year. 44 responses were received and duly analysed. Analysis of the responses to one particular question from the questionnaire is discussed in detail, namely "What strategy do you adopt when learning some mathematics?". In particular, the results can be used to characterise students as using Deep, Surface, Strategic or Procedural learning approaches in the discipline of mathematics. The paper also highlights similarities and differences between students who were identified as mathematically well-prepared and students who were identified as

mathematically less well-prepared. Namely, that the well-prepared students generally adopted a Deep or Strategic approach, which empirically predicts success, and the less well-prepared generally adopted a Surface or Procedural approach which can lead to poorer educational outcomes.

The same questionnaire was administered to the Physics students on completion of their first semester at university. Results from these responses are compared to the earlier responses in order to ascertain if the students had adapted their learning approaches in order to ensure success at university. Again, comparisons are made between the well-prepared and less well-prepared students.

Institute of Education

The Development of Language Acquisition in a Mature Learner
Rosmary Westwell

The primary objective of this study was to provide insight into the development of language acquisition in a mature learner.

While learning Spanish as a beginner, I kept a diary for two and a half years in which I recorded detailed, reflective responses to my language acquisition experiences. The diary data was recorded under prompt headings that gradually developed during the diary-keeping and the learning period.

At the end of the learning period, I summarised the content of the diary into four charts. Then I analysed the contents of the diary charts and of the whole diary. The two preliminary studies indicated key phenomena in the learning process. Two final interpretive analyses provided new insight and more substantial understanding of the nature of the development of the language acquisition of an individual learner.

The study revealed the significance of the language acquisition process itself in contrast to the products of language acquisition which currently form a major part of language acquisition theory.

University of Education, Iceland

Teaching and learning in Icelandic and Science in the context of national tests in Iceland
Runar Sigthorsson

The aim of my PhD study is to explore teaching and learning in years 8-10 of the Icelandic compulsory school in two subjects, Icelandic and Science, in the context of national tests in the two subjects at the end of year 10. Theoretically the study is based on a curriculum model where curriculum is seen as having three aspects: The intended curriculum, the implemented curriculum and the attained curriculum. In the presentation a further elaboration of this model will be presented and discussed.

University of Cambridge

Contrastive Rhetoric: Chinese EFL Learners' Awareness of Strategy Use in English Writing
Shih-Chieh Chien

Second language (L2) writing teachers have to address the types of challenges students face when they write in the L2. One significant challenge that has been pointed out in contrastive rhetoric studies revolves around the notion of culturally constructed rhetorical

traditions and patterns. It is claimed that L2 writers may have implicit frames or culturally-driven assumptions and values about academic writing in the first language (L1) that may transfer straightforwardly to academic writing in English (e.g., Connor, 1996, 2002; Panetta, 2001). Resolving the issue of rhetorical difference is of particular importance to the teaching of writing, since awareness of any such variation is crucial to the development of communicative competence in language learners. In this paper, I will explore the pre-suppositions and controversies underlying contrastive rhetoric. The study is investigated through the following questions: 1) What rhetorical strategies do students adopt in the English writing tasks? 2) Is there any difference in rhetorical strategy use between the high- and low- achieving students? 3) What are the teachers' writing instructions in terms of teaching rhetorical strategies? The findings suggest that while cultural differences do in fact exist, Chinese writers' English rhetorical strategy use were intertwined with their writing experiences, and the teachers' writing assessments and instructions. Contrastive rhetoric can be useful for composition and rhetoric teachers in understanding and working with EFL students, particularly in elucidating how the people learn to cope with the adjustments to write in different languages. Theoretical and educational implications resulting from the study are then discussed.

University of Cambridge

A Mixed-methods Study of Classroom Learning and Teaching --- Relating with School Leadership and Self-Evaluation
Sik Yan Tse

A Mixed-Methods approach was used to investigate perceptions of pupils and teachers in effective classroom learning and teaching in a purposive sample of Hong Kong secondary schools. This was done under a backdrop of a government-led School Self-Evaluation in most Hong Kong schools in recent years. Quantitative data in the form of coded responses of both pupils and teachers to questionnaires were collected, analysed by SPSS and collated with qualitative data in the form of transcripts of related Focus Groups using NVivo 7. Question items being addressed were focussed on pupils' and teachers' views on what amounts to an effective learning or teaching process inside the classroom. Parameters which might enhance effective learning or teaching were investigated particularly under a general school climate of distributed school leadership, self-evaluation and learning culture. The findings will be cross-referenced with investigations on school administrators within the same institutions using the same methodology on similar issues. This empirical study is intended to be a pilot study for a larger research project involving a larger sample and covering a wider cross-section with an intention of reaching greater generalizability.

University of Cambridge

A Cross-cultural Comparison of English and Chinese Mothers' Involvement in their Children's Education
Yan-Shing Chang

This is a cross-cultural comparative study of parental involvement in children's education at Key Stage 2. It focuses on mothers and children of white English and Chinese ethnic origin, using a two-group sample which also mixes gender and socio-economic status. The illustrative medium for the study is an official DfES book designed for parents to use with their children to support their school learning. The book, Learning Journey (ages 7-11): a parent's guide to the primary school curriculum is published in both English and Chinese versions. The study examines how this material is viewed by mothers in the two cultural groups and mothers' involvement in their children's education.

Interview findings reveal both similarities and differences within and across the cultural and socio-economic groups involved in the study. Some of the most striking differences are in the areas of homework, children's home life, and the views towards the value of Learning Journey (ages 7-11). The study suggests that different educational aspirations, cultural beliefs and parental educational and social background contribute to the differences of parental involvement in children's education.

University of Cambridge

On-line Survey Research: It is not Impossible! – The Case of Mathematicians
Zsolt Lavicza

According to numerous methodological papers it is increasingly more difficult to carry out survey research. One of the reasons is that during the past decade the number of survey requests has steadily increased and people become more reluctant to fill in questionnaires. Low response rates and missing data are particularly worrying for researchers who work on survey-based studies. These problems are even amplified for on-line based questionnaires and coupled with difficulties in drawing representative samples. These difficulties have caused considerable concerns in the development and implementation of my PhD study. My study utilizes on-line questionnaires to investigate university mathematicians' use and conceptions of technology-assisted teaching. But, fortunately, I received responses from more than 1100 mathematicians and obtained a rich data set for my future research. In, my talk I will share my experiences with on-line research and highlight that despite general concerns, with careful planning and following basic guidelines, on-line studies can be successfully carried out.