**Making visible what ‘matters’: learning for a confused economy**

Tara Fenwick, University of Stirling

In what some might characterise as post-political times, where knowledge economy discourses have become suspicious and seriously embattled, there has arisen a revived obsession in education and the social sciences with materiality. It manifests in various labels such as ‘new materialisms’, sociomaterial analyses, STS studies (science and technology), complexity theory, particular versions of practice theory and so forth, each of which defend distinct approaches, progenitors, and priorities. But among them we can discern a common devotion to making visible the ‘matter’ of everyday life and practice. This research attraction to the material and to mattering processes in the social seems particularly potent in educational fields related to work and organisations. An obvious question, then, is what if anything this might offer to research and to practice in vocational education and training. Towards a response to this, I begin by outlining different branches as I see them of these materialist enthusiasts, pointing to certain key contributions they may offer as well as their limitations and critiques. Then I will explore the insights that might be generated through a sociomaterial analysis of workplace learning, drawing from my own diverse studies of learning among immigrant garment workers, contract workers, older workers, and rural police workers. These raise questions about how the material matters, its play of visibility and invisibility, and what matters most in work, practice and learning.

Chair : Lorna Unwin, Editor JVET

2.55pm-4.25pm – Conference Papers: 1

1.1 Training for young adults aged 19-24 who are not in education, employment or training (NEET)  
Clare Southcott and Anneka Dawson, NFER

The high number of young people who are NEET is a major policy challenge. Increasing young people’s participation in learning, skills training and work is central to addressing this challenge and stimulating...
economic growth and facilitating social mobility.

This paper presents the findings from a National Foundation for Educational Research (NFER) project which investigated how well colleges and training providers, who were given additional funding in 2011/2012, were able to prepare learners for further learning, apprenticeships and other work. The purpose of the funding was to provide flexible vocationally-oriented programmes, personalised learning and individual intensive support.

We will examine the types of training provision on offer, including how the funding had been used across providers, effective approaches to reaching and recruiting young adults and the importance of partnership working. We will also explore the perceived impact of the training programmes on providers and learners, including progression into further training or employment. We will conclude the paper by discussing the implications of the research for policy and practice in the context of the economic downturn and interventions for NEET young people.

**Self-esteem and Social Justice? Engaging Young People on the Margins of Education and Employment**

Robin Simmons, Ron Thompson and Lisa Russell, University of Huddersfield

This paper is based on three years of ethnographic research with young people on the margins of work and learning. Drawing on data collected in two local authorities in the north of England with high proportions of young people categorised as NEET (not in education, employment or training), the research follows young people as they ‘churn’ between different forms of participation and non-participation, including training programmes which aim to promote ‘employability’ skills.

Whilst we recognise that vocational education can help build motivation and self-esteem, it is argued that such an approach, however committed tutors are to learners’ well-being, can limit the development of young people and the opportunities available to them. The paper draws on Bernstein’s work on pedagogic discourses and ‘trainability’ to analyse work-based learning for marginalised young people, and to offer an alternative vision of this provision – one which, we argue, offers increased possibilities both for student well-being and social justice more broadly. Our central point is that, if employability programmes are to equip participants for socially and economically fulfilled lives, marginalised learners require significantly different forms of education and training. This, we argue, needs to develop not only self-esteem and motivation, but expose young people to principled learning and traditional conceptions of skill rooted in a unity of knowledge and action.

1.2 The 2012 – 2013 Gen Green 3 Research Project: where are we up to with skills for sustainability in Australia?

Dr Mike Brown; Dr Fabian Sack; Dr Damon Cartledge (LaTrobe University, Australia)

This paper reports the results and findings from the 2012-2013 GenGreen 3 research project. This study has three parts to it. The first part involves a survey of the apprentices and trainees who participated in the last two national rounds of the Worldskills Australia competition and of the eight hundred past and present participants in the national
Worldskills competition. In general the results show a high desire and preference by these apprentices and trainees to learn and develop skills for sustainability. In part these survey results begin to address an issue raised by Billett (2000), and Golding and Foley (2012), on the need to include the concerns of VET learners into the demand side of VET. The second part of this study involved semi-structured interviews with industry experts, who were asked about their experiences and perceptions of the need, development and utilisation of skills for social, economic and environmental sustainability. While the third and final part of the study involved semi-structured interviews with a representative from each of the eleven Industry Skills Councils (ISCs. It is argued that taken together that the results from these three cohorts provide useful insight into where we are currently up to with developing skills for sustainability in Australia.

Migrant Integration in a VET-Oriented Schooling System: A Ladder Hard to Climb
Latina Joelle and Jose Ramirez, University of Geneva

Taking into account different forms of capital, we focus on migrant integration into the Swiss school system, as expressed by their track at the upper secondary level. We examine how school transitions of children from certain migrant communities are affected by a lack of social capital, by using a reduced form multinomial logit on longitudinal data from Geneva, for the period 1993-2007. Results confirm that social capital matters for all students, although in a heterogeneous way across types of students and transition outcomes. Conditional transition probabilities to the academic track are heavily dependent on social capital endowments, as are dropout probabilities, reflecting an overall polarization of the school system. Chances of access to apprenticeship training increase with the level of social capital but, at a given level of social capital, access is more difficult for migrants compared to natives, while controlling for other factors. Inequalities also appear between groups of migrants, with traditional migrant groups exhibiting closer transition patterns to natives. When ending compulsory school, recent and socioeconomically disadvantaged migrants are, more often than comparable natives, oriented to non-certifying remedial education and are unable to benefit from the apprenticeship system, thereby reducing their chances of climbing up the socioeconomic ladder.

Pat Morton, Jill Collins, Sheffield Hallam University, Glynis Dean, RAF College, Cranwell

A period of work-related learning for school students in the UK has been recognised both as a contributing factor in occupational segregation - when gendered occupational stereotypes are often reinforced (Francis et al, 2005). However, good quality work experience has also been an opportunity to challenge stereotypes (Morton and Collins, 2010). Work experience has been found to limit aspirations, where working class children find themselves in classed and gendered work placements (Hatcher and Le Gallais, 2008) and this lack of value (Wolf, 2011) has led to the removal of the statutory requirement on schools to provide work experience. This paper analyses the recruitment processes for a Memorial Room Chair
Ann Harris
project with the Royal Air Force that has been designed to widen participation of girls from all backgrounds in engineering careers. As part of a longitudinal evaluation over three years, data has shown how support provided for the girls in the application process can vary significantly. Some participants have been helped in their application and others have had less support. The paper explores the problems of continuing to widen participation beyond schools that have engaged and learned how to succeed with 'best students' in taking part in a significant career related vocational learning experience.

Train for war, adapt for peace: a case study of the implications of risk management on static line parachute training in the ADF
Melenie Ross and Tonia Gray, University of Western Sydney

Health, safety and risk management are integral to the provision of authentic training in the Australian VET context. Within the Australian Defence Force, Australia’s largest Registered Training Organisation, VET enables learners to work safely in complex and often dangerous situations. Focusing on Static Line Parachute Training, this study analysed the role of risk management within the Australian Army learning environment and compared curriculum outcomes across the Australian, US and British Armies to the workplace requirements of a paratrooper. A qualitative research framework employed semi-structured interviews with learners and instructional staff to gain insight into the perception of risk management within the learning setting. Risk management ensures learners complete their training without incident or injury. However one consequence within this complex learning environment is the negative impact such strategies may have on the workplace outcome. It is a delicate balance. This study examined the relationship between the learning environment and the workplace, and the impact of risk management on their equilibrium. Findings illustrate whilst injury rates have significantly decreased as a result of risk management within this VET environment, learners have not obtained the required knowledge and skills to be 'job ready'. In other words, learners are not equipped to assume the duties required of a static line paratrooper.

1.4 How Does Size Matter?
Skill formation processes in small and large firms
Dan Bishop, University of Leicester

The paper reports on the initial stages of a new research project funded by the British Academy. The primary aim of the project is to investigate the impact of firm size upon skill formation processes.

This issue is raised at a time when ongoing recessionary conditions are placing investment in skills at risk, and is prompted by survey evidence showing that small firms (which employ over half of the private sector workforce) display much lower levels of employee training, on average, than do their larger counterparts. Consequently, some commentators have claimed that small firms represent a learning-impoverished environment that disadvantages both the firms and those who work within them. Others, however, have argued that surveys of training neglect other, more informal modes of learning on which small firms tend to rely. As yet, no research has systematically confronted this debate; it is this
gap that the study aims to address. Qualitative research is underway in matched firms of differing sizes in three sectors (accountancy, engineering and hospitality), with a particular focus on how formal and informal learning articulate in different ways depending on the size of the organisation. The paper outlines the academic and policy contexts of the research and presents some of the initial findings.

Continuing Education and training models and strategies for transport and logistics workers
Sarojni Choy, Griffith University

Transport and logistics workers are required to constantly update their knowledge and skills and respond to transformations in the industry due to continuous changes in occupational and work requirements, principally influenced by new technologies, and health and safety regulations. Their jobs are mostly physical and much of what they are required to learn tends to be on-the-job, frequently in isolation as they deliver goods at long distances. Given that most workers in the transport industry operate on long hours of rostered shift work, organising learning for these workers demands special considerations for learning at and through work. In this paper we report the findings of research with twenty one workers from the transport and logistics enterprises, from the State of Queensland, Australia. They participated in face-to-face semi-structured interviews and also responded to written questions containing tick boxes with items relating to how workers were currently learning, their preferences for learning, and how they would prefer to be assisted for future learning. The findings are used to propose a framework that sets out what might constitute effective models and strategies for continuing education and training for workers in the transport and logistics industry.

1.5 Do Cambridge Nationals support progression to further studies at school or college, to higher education courses and to work-based learning?
Carmen Vidal Rodeiro, Cambridge Assessment

OCR National qualifications, now Cambridge Nationals, are vocationally-related qualifications that take an engaging, practical and inspiring approach to learning and assessment. They are industry-relevant, geared to key sector requirements and very popular with schools and colleges because they suit a broad range of learning styles and abilities.

The main aim of this research was to investigate if these vocationally-related qualifications supported progression into the labour market (e.g. via work based learning) and into further or higher education, as recommended by the Wolf review of vocational education (Wolf, 2011).

In particular, the research looked at:

- the characteristics of the learners who were awarded OCR Nationals (age, prior attainment, socio-economic background and centre type attended);
- the qualifications taken alongside OCR Nationals;
- the progression of candidates with OCR Nationals in terms of further studies or work based learning.
The focus was on students who were awarded OCR Nationals from the academic year 2006/07 to the academic year 2008/09.

Overall, the outcomes of this work showed that OCR Nationals enabled progression to further study at schools or colleges and at university in a variety of ways and therefore are an important contribution to the 14-19 curriculum. There were also many instances when learners progressed towards work based learning programmes and, in particular, to apprenticeships.

Tools for assessment in Swedish upper secondary apprenticeship: what do they assess?
Ingrid Berglund, Stockholm University

In 2008, a pilot project with apprenticeship as an alternative pathway of upper secondary vocational education (USVE) started in Sweden. This paper is based on a follow-up study 2009-2011, funded by the Swedish National Agency for Education (SNAE) focusing on pedagogical aspects of apprenticeship. In this article, we present results related to assessment in upper secondary VET apprenticeship. The issue for this article is to describe the tools used for assessment and what these make available to assess.

The data this paper is based upon are of three kinds: interviews with teachers, apprentices and supervisors, audio-recorded trilateral sessions for assessment, and the different kinds of documentations that were used as tools for follow up and assessment of students’ progress. Most of the tools used were either various kinds of checklists that guaranteed the apprentices had participated in or observed specific activities or situations, or rating scales focusing students’ behaviour. In few cases the quality of aspects of students’ work – that is aspects of vocational knowing – was in focus. These findings are discussed in relation to aspects of the conditions for VET-teachers’ work.

1.6 Vocational Institutions and practices in the higher education field
Bill Esmond, Chesterfield College

A succession of policy initiatives over the last fifteen years has sought to promote the teaching of higher education programmes in English Further Education Colleges. Nevertheless, these institutions have yet to be widely accepted as sites for higher education. Although higher education systems have expanded substantially through the addition of vocational institutions, previous waves of expansion have tended to retain practices and institutional forms associated with elite traditions. FE Colleges, conversely, have remained primarily as sites of vocational education at earlier levels of study. Neither form of development has led to a distinctive pattern of higher-level learning or knowledge creation, as illustrated by recent controversy over degree-awarding powers for FE institutions. This paper draws on a recent study and on notions of a relatively autonomous ‘field’ of higher education, to consider the ways in which successive new sites of higher education have served to undermine or reinforce this autonomy; and the implications for the diversity and inequalities of post-compulsory education.
Pathways from VET into HE: Hybrid Qualifications – a Swiss-German comparison
Thomas Deissinger, University of Konstanz, Germany
Philipp Gonon, University of Zurich, Switzerland

In the area of VET there is a growing pressure that VET should not only produce skills, but also enable individuals to progress into Higher Education. This issue is embedded within a more general debate on flexibility and permeability within education systems. This includes the notion of “hybrid qualifications” (HQ) and also “diversification” in VET. Both issues, in political and pedagogical terms, are obviously rather underrepresented in the German VET context while Switzerland has undertaken reforms in this area since the 1990s. It remains open whether these reforms are really due to the European VET agenda. However, when it comes to apprenticeships, most other countries appear to be more “prepared” than Germany, where links between an apprenticeship in the dual system and Higher Education are virtually non-existent. In Switzerland, which is also a country with a long-standing and even stronger apprenticeship tradition and high esteem for work-based vocational training throughout the whole economy, the concept of “Berufsmaturitaet” (professional baccalaureate) has profoundly changed the VET system and its links to Higher Education. Here, hybridity can be seen as a tool to make the VET system more flexible, open borders between institutions and responsibilities and help young people to define their individual pathways into and beyond a vocational career. At the same time, it has served official government policy by “bringing” more young people into Higher Education. It becomes clear that our topic therefore has not just a pedagogical relevance, but also a social and economic one in the context of the current VET modernisation debate. The paper will focus on the different approaches in the two countries: Whereas in Germany HQ are delivered in full-time VET, in Switzerland they are linked to the apprenticeship system.

1.7 Closing the loop: Listening and responding to learner voice in vocational education and training - an Australian and UK perspective
Annette Foley, Ballarat University and Peter Lavender, NIACE.

This paper presents a comparative analysis of findings taken from a recent research project funded by the National VET Advisory Council (NVEAC) in Australia. The research involved ‘conducting a review and analysis of effective models and underpinning principles for gathering and responding to feedback from learners particularly disadvantaged learners’ in the Vocational Education and FE settings. The paper draws on interviews conducted with more than 60 vocational education and training managers and staff, students and student organizations and a range of VET and FE stakeholders in Australia and the UK and European settings in Ireland, and Norway. The paper critically analyses and explores the models and approaches used in all settings to better understand what systems and models work to capture and inform or exclude learner voice/s from understanding and responding to learner needs and outcomes in VET, FE and Adult learner settings. The paper discusses the findings from the different countries to better understand what were the mechanisms used to capture learner voice and how these mechanisms can be analysed to optimise the FE, VET and ACE Seminar Room A
Chair
Terry Hyland
Exploring the invisible: Bernstein and learning through social networks.
Cheryl Reynolds, University of Huddersfield

This paper is prompted by the incipient use of social learning networks in Higher Education. Their recent introduction into a vocational degree at a UK University is the subject of a small-scale, action research project, in which conversational analysis was used to systematically compare students’ written, online contributions with the voices they adopt in formal assignments. In general, their online contributions were more clipped, informal, lyrical, humorous, arch and playful than would normally be thought acceptable for writing in an academic setting. To what extent, therefore, does this type of online learning constitute an ‘invisible pedagogy’ (Bernstein, 1990), in which the absence of a clearly articulated, developmental agenda means that students learn through a more contingent, open-ended and flexible experience that they see as merely ‘play’? Did the medium lower inhibitions to write in ways that equipped the tutor with a fuller picture of the students’ readiness to learn more, as well as insights into how this might best be achieved? This study also makes use of Bernstein’s discussion of the relationships between pedagogy, class and vested interests, in order to interrogate how social networks might be exploited in an age of austerity and a globally competitive market for education.

4.25pm-4.45pm – Tea

4.45pm-6.15pm – Conference Papers: 2

2.1 Principles of powerful learning environments in secondary vocational education as perceived by teacher educators, teachers and students.

Inge Placklé, Arno Libotton and Nadine Engels
Educational Sciences, Vrije Universiteit Brussel

In Flanders, secondary vocational education went through a large scale reform during the last decennium because of the implementation of “Project Integrated General Subjects” (PIGS). PIGS is a broad fields subject integrating several scholarly disciplines. Nevertheless, students and teachers often don’t perceive the learning environment the way it was intended by the designers. The perception of students and teachers might be crucial because more than the learning environment itself, the perception determines how effective the learning environment is. In this research, we build bridges between teachers, teacher educators and students perceptions to identify desirable design principles.

Research question: “Which instructional design principles do teacher educators, teachers and students consider important in order to create a powerful learning environment in Secondary Vocational Education?

Method: We combined perspectives of teacher educators, teachers and students to build a shared model of learning environments, perceived as more powerful by all stakeholders.

Results: We established ten design principles: self-regulated learning
and reflection, problem solving, cooperative learning, shared responsibility, authentic and challenging learning environment, differentiation, adapted evaluation, coaching, and (vocational) identity development. We grouped the principles into a model for Powerful Learning Environments in secondary Vocational Education, the PoLEVE.

Modelling inclusive practice: an enquiry into using creative teaching strategies to support differentiation in the VET classroom
Josie Harvey, Gwyneth Allatt, University of Huddersfield

This paper is based on an ongoing exploration of diversity within groups of trainee teachers on a PGCE / Cert Ed. Programme (Lifelong Learning) at the University of Huddersfield. The research interest has developed from the increasing diversity of this student cohort, as a result of academic, employment and cultural backgrounds, for example. The recent introduction of assessment at different levels has also highlighted the need to develop more creative and differentiated teaching strategies to make delivery of the programme inclusive, accessible and supportive for everyone.

There are three strands to our enquiry:

• identification of the diversity within our student groups and the issues, both positive and problematic, that are faced as a result of this;
• development and modelling of creative and differentiated teaching strategies with our own trainees;
• exploration of ways in which our trainee teachers replicate these strategies with their own students on placement.

The paper utilises evaluation and feedback from our own students in addition to case studies of their own teaching practice to assess the effectiveness of these strategies.

2.2 How vocational identities are constructed through consultancy and contract based employment in the Singaporean labour market.

Helen Bound, Karen Evans, Peter Rushbrook, Mahaletchumi Sivalingam, Edmund Waite

The rise of contingent (non-permanent) work is a feature of labour markets globally. This growth creates a need to better understand how the experience of ‘free-lance’ and contract-based work contributes to or constrains learning and identity formation, and how the learning of these workers can be supported. This paper discusses early findings from research in three industry sectors in Singapore: creative industries, the Continuing Education and Training (CET) sector and the low wage sector of cleaning services. We are conducting interviews with 30 free-lance or contract-based workers in each sector (90 interview respondents), capturing data about entry into and motivation for contingent work, how work-related networks and relationships are developed and maintained, how roles and movements across roles are negotiated. We are investigating how these workers think and feel their ways into occupational and social identities as they move between different sites of practice. These negotiations and processes do not stand alone; rather
they are embedded in wider, ‘bigger’ sets of relationships that mediate day-to-day work practices. We find that dominant modes of industry engagement; professional, industry and workplace discourses; policy around funding and industrial relations, the degree of industry susceptibility to global financial fluctuations and the organisation and flow of production, along with these workers’ own sense of agency, mediate identity formation and learning opportunities.

Uneasy relations or supportive partnerships? Publicly funded information agencies and private training organisations in Australia.
Mary Carroll, Charles Sturt University

In the last decade there has been an expansion in the number of private Registered Training Organisations (RTOs) delivering Vocational Education and Training (VET) in Australia. Until recently however little attention has been paid to establishing minimum standards of services and resource provision for such organisations. This has opened up the possibility that increasing numbers of vocational students in Australia are operating outside the information provision and service infrastructure traditions and standards of Australian public vocational education. Historically access to information infrastructure has been considered requisite for continuing and lifelong learning, self-improvement and essential in providing equity of opportunity, particularly amongst trade and other vocational workers. Limited scrutiny to-date of the approach of private RTOs in Australia to information provision has meant that their impact on other publically funded information agencies has remained an underexplored aspect of the student and community experience. This paper will discuss the preliminary findings of an exploratory research project Public Space-Private Places: Private RTOs and information infrastructure funded in 2012-2013 by the National Centre for Vocational Education and Research (NCVER). This project aims to examine through a number of case studies any impact on public libraries of selected private RTOs at four locations in Australia.

2.3 Interpreting competency standards in Australian VET
Steve Hodge, Ballarat University

In Australian Vocational Education and Training (VET), competency standards serve as the vital link between the skill development needs of industries and sectors on the one hand, and the work of VET trainers and assessors on the other. Competency standards are texts that possess a uniform structure with content drawn from analyses of the characteristic tasks of the jobs encompassed by the national VET system. It is a fundamental assumption of the system that the standards are a guarantee of consistent learning outcomes and assessment across the system. This paper reports on research into the understanding and use of competency standards by Australian VET practitioners. Thirty practitioners working in different roles and industries and with different levels of experience and education were interviewed for the project. The research reveals that practitioners differ significantly with respect to their understanding of the purpose and components of competency standards. They employ a variety of approaches to interpreting the standards, and they have diverse views about the capacity of competency standards to describe competent work. The paper reflects on the implications for a competency-based system of diverse interpretations of competency standards by those responsible for
transmitting the intentions of the standards designers.

What is vocational pedagogy and who is it for?
Kevin Orr, University of Huddersfield

This paper examines the current debate around policy on vocational pedagogy in the United Kingdom and draws on the findings from an LSIS-funded research project which investigated the vocational pedagogy used in four different providers. Alison Wolf’s Report on Vocational Education (2011) is the most prominent contribution to the debate but there have been many others. Amongst them City and Guilds produced a report in 2012 (How to teach vocational education: A theory of vocational pedagogy) as did Learning and Skills Network in 2011 (Effective teaching and learning in vocational education) and the Edge Foundation in 2010 (Mind the gap: Research and reality in practical and vocational education). Most recently the government instigated the Commission on Adult Vocational Teaching and Learning. As well as reviewing the related literature the researchers observed and interviewed vocational teachers in two colleges and two private providers to locate and analyse differing understandings of what vocational pedagogy means. Informed by the work of Michael Young and Leesa Wheelahan, the paper explores how understandings of vocational pedagogy relate theory and practice in ways that promote or limit access to abstract knowledge, with implications for social justice.

2.4 Technicians in advanced manufacturing in the UK: issues and evidence.
Paul Lewis, Department of Political Economy’ King’s College London

Technicians are ‘highly productive people who apply proven techniques and procedures to the solution of practical problems. They carry supervisory or technical responsibility and competently deliver their skills and creativity in the fields of science, engineering and technology’ (Technician Council 2012). As it is currently used by policy-makers in the UK, the term ‘technician’ denotes people occupying technical roles that require either level 3 or level 4/5 skills. There is currently widespread concern about skills shortages at the technician level in the UK economy. The policy response to this problem centres on the creation of a ‘modern class of technicians’ and ambitious targets have been set for the number of apprentice technicians.

The paper proposed for JVET is intended to inform policy on technician skills and training by reporting on the results of research into those issues in two parts of the advanced manufacturing sector in the UK, namely the space and aerospace industries.

VET and the reconstruction of the labour aristocracy.
Erica Smith, Ballarat University

A feature of the expansion of apprenticeship schemes in parts of the Anglophone world, and to a lesser extent in other countries, has been the provision of apprenticeship opportunities in occupations outside the traditional trades. The combination of formal training, qualifications and employment outcomes has proved attractive to employers and employees alike, although the rapid expansion has not been without teething troubles. During the past two years there has been a considerable fightback from interest groups seeking to reduce training opportunities in the
non-trades areas. For example in Australia an Expert Panel, heavily composed of stakeholders from traditional trades areas, recommended the removal of government funding incentives for almost all apprenticeships not in the traditional trades. Similar alliances in England are opposing the recent expansion of the apprenticeship system to broader sections of the economy. This paper analyses policy documents and public statements to examine, and attempt to theorise, such attempts to deny funded training to some workers. One lens through which these developments can be examined is the theory of the labour aristocracy, developed through analysis of 19th century labour history. The issue raises interesting questions about why VET, traditionally seen as the friend of the working class, is now also a battleground in which some occupations seek to assert their dominance over others, and why stakeholders have acceded so readily to deeply conservative positions.

2.5 Skilled migrants, refugees and policy ‘blind spots’: the case of neglected migrants in Australia
Susan Webb, Monash University

Australia’s skilled migration programme encourages discretionary inward migration to meet internal skill shortages especially in regional areas. But the literature on skilled migration largely tells a story of male migration; ‘women (dis)appear’ or they are relegated to the family reunion flow (Kofman & Raghuram, 2005:149). The work and learning aspirations, needs and outcomes for migrant women, especially secondary migrants are under-recognised in skilled migration policies and practices (Curran et al. 2006; McCall, 2000). Understandings of the experience of highly skilled female secondary migrants are underdeveloped, especially in the Australian context where the skills of migrants, often women, are underutilised (Colic-Peisker, 2011; Devos, 2011). This paper addresses these concerns by investigating migratory trajectories into life in regional Australia using a mainly qualitative narrative approach. The findings of this project funded by the National Council for Vocational Education Research (NCVER) highlight the tension between a skilled migration policy predicated on individual discretionary migration and the experiences of many migrants who engage in these transitions, not just as individuals, but through decision making within households. Migration policy has ‘blind-spots’. For many, the transition is risky and affected by the different migratory networks people engage with, intersected by gender, race and class.

Refugees (not) accessing VET across Europe: the impact of structures of whiteness.
Charlotte Chadderton, Casey Edmonds, UEL, London

This paper is based on a study (2010-11) which examined the meso-social benefits of, and barriers to vocational education and training (VET) for adult refugees to European countries. The project was commissioned by CEDEFOP (the Centre Europeen pour le Developpement de la Formation Professionnelle), the European Agency funded by the European Commission to promote the development of VET in the EU. It involved bringing together experts from different European countries (UK, Germany, Romania, Italy, Denmark) to share knowledge. There is a large amount of information, both on refugees and on VET in individual
countries and organisations. However, it is mostly treated as two separate, unrelated themes. This research begins to fill that gap, providing a cross European study and analysis. We argue that a key factor in shaping refugees’ experiences of, and access to, VET are the racial structures integral to capitalist societies. The findings are contextualised by drawing together other literature which analyses white privilege in the labour market, and we argue that barriers faced by refugees are potentially related to structures and discourses of white privilege, which shape notions of work and workers in Europe and sustain racial hierarchies.

2.6 Post-fordist illusions - the knowledge economy and workplace learning?
James Avis, University of Huddersfield

Theorisations of workplace learning often assume an optimistic hue. This arises from the recognition of informal learning and its salience not only for workplace practices but also its implications for social justice. Many social theorists argue the shift towards knowledge based economies (Kbe's) and the working practices of 'leading edge' employers veer towards social production. Terms such as co-construction, co-configuration, networks and 'co-opetition' describe these putatively progressive practices. It is important to interrogate these arguments that address the development of Kbe's and in which the pursuit of competitiveness and social cohesion is 'writ large'. There is an articulation of post-fordism to social production. In the 1990's it was suggested that post-fordism would overcome the exploitation embedded in Fordist work relations, an argument critiqued for its failure to recognise capitalist antagonisms and the coexistence of different 'modes of production'. Despite this critique there are particular currents in contemporary thought that assert that Kbe's have not only progressive but also transformative possibilities. These flow from developments in the forces of production and changes in the way in which surplus value is generated. Such arguments are allied to notions of expansive learning and the salience of the creative industries in Kbe's. This paper interrogates such arguments for their policy, educational and social justice implications, suggesting that, as with earlier discussions of post-fordism, these arguments are amenable to capitalist appropriation.

Workplace learning environments and vocational excellence
Susan James and Craig Holmes, University of Oxford

Vocational education and training (VET) in the UK has received much bad press domestically and internationally and the criticism is longstanding. Yet, there is evidence pointing to positive aspects of VET. This paper, rather than focusing on a deficit model, draws on a study of skills competitions to begin to understand better what vocational excellence looks like and how it is developed, focusing particularly on the learning environment at work. The study surveyed 223 young people, vying for selection into the WorldSkills Team UK in 2009, 2011 and 2013, about their workplace learning environments. The findings show that the more 'expansive' the workplace environment, the more likely the competitor is going to have the necessary and sufficient skill base to begin working towards meeting WorldSkills international standards in that skill and
being selected for the team. However, the findings also show that pre-
competition working environment does not matter at all for winning
medals, which instead is dependent on the WorldSkills training received
and the individual characteristics of the young person under competition
pressure. Analysis shows that intrinsic motivational factors are most
important for medal winners rather than extrinsic factors.

2.7 How can major research findings about returns to qualifications illuminate
the comparability of qualifications?
Jackie Greatorex, Cambridge Assessment

Comparability of qualifications is a topic of national significance. When
two qualifications lead to the same job it is important that they are of the
same standard. This study investigates how major research findings about
returns to qualifications illuminate the comparability of qualifications.
Returns to qualifications measure how much more is earned by people
with a particular qualification compared to people with similar
characteristics who do not have the qualification. There are several
findings, which are interpreted in terms of supply, demand and other
factors. For instance own brand qualifications delivered higher returns
than qualifications from government initiatives. This implies that (1) non-
government organisations are better placed than government to develop
qualifications which meet educational and economic needs, and (2)
standards in own brand qualifications are perceived to be higher than
those of qualifications from government initiatives. This study suggests
that there are two recommended ways of researching returns to
qualifications for comparability purposes (1) synthesizing major research
findings as per this review and (2) obtaining data and running bespoke
analyses.

Modularisation and VET: the quiet revolution in European curriculum
reform.
Roy Canning, University of Stirling, Matthias Pilz, Junmin Li, University
of Cologne, Sara Minty, University of Edinburgh

The issue of modularising vocational training systems has been the
subject of debate at European level for some 20 years. One of the
underlying tensions with this debate is how in fact can we adequately
conceptualise the notion of modularisation to enable any coherent
empirical analysis to be undertaken. The study attempts to do this by
building upon the theoretical work of Pilz (2002, 2012) who postulates
different forms of modularisation from the holistic to the radical. Against
this theoretical backdrop we have chartered the development of
modularisation structures within the IVET curriculum across 15
European countries. We have explained the rationale for modularisation,
the extent of its provision and the form it takes within different countries.
In broad terms we will argue that there has been a quiet revolution taking
place in the growth of modularisation across all European countries.
Although the debate has often been polarized between traditional and
radical forms of modularisation in reality the majority of countries in our
study have adopted moderate forms of modularisation that have been
developed over time in response to employer and student needs.

7.15pm Dinner
3.1 VET in times of crisis; professionalising Cinderella.

Yvonne Hillier, University of Brighton

This paper discusses the nexus of government policy making, performativity culture and the ensuing tension for practitioners (Parsons et al, 2009, Hopper, 2010) in England. Governments have increasingly signalled an economic imperative for learners in the VET system and argued for a professionalism that is narrowly conceived and monitored (BIS, 2012, Keep, 2011). Yet there is an expansive approach to professional development for VET practitioners drawing upon the notion of phronesis, ie wise and informed judgment (Kilminster et al, 2012, Plowright and Barr, 2011, Hager and Boud, 2011). In England, Lingfield’s review of professionalism is disrupting professional development of VET practitioners. Amongst the recommendations are an end to regulation of initial teaching qualifications and monitoring of CPD for all staff. In its place will be a new FE Guild, a new FE Covenant and a new Chartered Status for FE Colleges. Existing professional support by the Institute for Learning (IfL) and the Learning and Skills Improvement Service (LSIS) are both under threat as the new Guild is established. This paper draws upon research conducted in England and Australia on fostering professional development through the use of research practice networks (Appleby and Hillier, 2012, Hillier and Figgis, 2011) which demonstrate that a critically reflective stance is more conducive to fostering innovative and creative professional practice than that of performativity and compliance.

Building an evidence base for the development of VET professionals: what do we know and what do we need to know?

Michele Simons and Roger Harris, University of South Australia

The Productivity Commission (2011) report into the vocational education and training (VET) workforce in Australia raised significant questions about how to recruit, train, retain and develop VET practitioners, along with what might be the evidence required to ‘prove’ the effectiveness (or otherwise) of the various approaches used to develop the workforce. Further, the report questioned the extent to which there is evidence to support assertions about the current capacity of the VET, particularly as it relates to the effectiveness of different pathways used to prepare VET practitioners. This paper critically analyses the evidence base we have available to inform our understandings of the ways used to develop the VET workforce. An evaluative framework is outlined, along with the processes used to apply this framework to a range of literature covering topics such the characteristics of the VET workforce; the outcomes of the ways currently used to prepare VET professionals for practice and the most effective ways of preparing VET professionals to work with diverse groups of learners. The paper concludes with suggestions for a research agenda which will help researchers, policy makers and practitioners build...
on what is known and develop a richer evidence base that can address the development of the VET workforce into the future.

3.2 Evaluating Competence bases education in Indonesia agricultural vocational schools  
Misbah Zainun, Ministry of Education and Culture, Indonesia

Indonesia had been adopting the competence-based concept in its education system formally since last decade. However, research on the implementation of competence-based education (CBE) is still scarce particularly that is internationally accessible. Worldwide, recently CBE is gaining more attention from policymakers and researchers in vocational education. Realising CBE concept was subject to ambiguity, Dutch researchers developed a comprehensive CBE model to explain of what CBE should look alike. This model consisted of ten CBE principles and five levels of implementation. This model was useful for investigating systematically CBE implementation of a study program. We, in this present study, use this model to gain insight into the extent CBE is taking place in Indonesia agricultural education. We collected series of data from educational policy documents, principals’ school self-assessment and from cross-sectional survey using teachers and students’ questionnaire of CBE. 453 teachers and 2219 students from 41 agricultural schools involved in this study. Based on the research results, we conclude that competence-based education indeed being implemented in Indonesia agricultural schools. School principals, teachers and students noticed the presents of CBE principles, except for one principle related to the flexibility of a study program. This study also reveals that CBE, which was originally developed in the western context, is applicable in non-western context, Indonesia.

Competence assessment in VET – great dreams vs reality  
Christiane Schopf, Business School, University of Vienna

The current discussion on competence oriented assessment in Austrian VET-colleges is – in contrast to the Anglo-Saxon tradition of outcome standard based accreditation, in the context of which “competency” mostly refers to “specific capabilities” – coined by a competence concept that refers to “a person’s overall capacity”. This has a lot to do with the fact that these schools provide hybrid qualifications – general university access and professional education. The author clearly prefers this holistic concept, although it causes even more problems when it comes to assessment. Against this background the paper will theoretically discuss aspects of competence description, competence measurement through performance observation and the influence of the exam format on the results. Additionally empirical evidence from a pilot project in 15 Austrian VET-colleges using a case study for the assessment of student’s business administration competences will be presented.

With further reference to two other studies carried out at the WU Institute for Business Education, it has to be concluded that the assessment of competences is a very difficult task. Therefore in all assessments it has to be thoroughly questioned: What is claimed to be measured and what is really measured? From the author’s point of view the requirements are
often exaggerated and cannot be met with the instruments on hand.

3.3 Employability Challenges, Skills for Life: developing employability in an era of globalisation
Ann Harris, Lyn Hall and Steven Boyd, University of Huddersfield

This paper examines evidence produced by research conducted by a UK and Chinese University. It explores skills/competencies expected of new graduates by employers in both countries. Globalisation of the supply and demand for higher education has alerted universities to a need for graduates to develop employability skills that are sustainable, relevant and responsive to an increasingly competitive global labour market. The paper provides a comparative international perspective on employability skills, and includes an analysis of an interactive web-based package that has been created to support Chinese graduates develop employability skills.

Specifically, it explores findings from a quantitative study investigating three categories of employability skills: personal qualities, subject knowledge and professionalism and abilities. It analyses findings that show employers in both countries aim to recruit graduates who are reliable, innovative, lifelong learners, and who are also competent in teamworking and problem solving. It also contrasts the particular employability skills more highly rated by Chinese employers e.g. social responsibility, ethical values and negotiation/persuasion with those highlighted by UK employers e.g. enthusiasm, adaptability, communication and self motivation and explores the cultural significance of this. In conclusion, the paper examines the implications of these results for universities seeking to empower graduates to address proactively the global employability challenge through generating sustainable skills for life.

The student experience of VET
Tapiwa Katsande, Anglia Ruskin University

The picture that emerges from vocational education literature denotes that Vocational Education and Training is widely acclaimed as a remedy for youth unemployment and a stimulus for economic growth. This study investigates the role of vocational education from students’ and education professionals’ perspectives.

The explanatory case study approach was employed for this study. In-depth interviews, semi-structured questionnaires and focus group discussions were conducted with 30 secondary school students, 3 teachers and 2 Education Inspectors from Murewa district, Zimbabwe. An analysis of the pilot research revealed that students’ sentiments contradicted Education Inspectors’ assumptions about youth experiences. Education Inspectors believed that negative attitudes towards vocational education were diminishing. Some students viewed vocational education as second class. Others did not see any career prospects of vocational qualifications. Teachers and students alike were sceptical about the use of vocational qualifications in securing employment or self-employment. Specialist careers’ guidance was ad hoc and students relied on teachers and parents for careers’ guidance. This study will contribute to the on-going review of Zimbabwe’s education
system which is focussing on meeting the needs and aspirations of young people. The project will inform future research on career’s guidance, curriculum development and culture change in rural communities and schools.

3.4 Work-based VET – Companies’ role as a Facilitator for school-to-work-transition
Marthe Geiben, Philipp Grollmann, Tobias Wolfgarten, BIBB, Bonn, Germany

High youth unemployment is an urgent issue in the current economic crisis. Data have shown that dual forms of vocational education are particularly supportive to smooth school-to-work-transitions. In an establishment survey (N=1600) our study INDUCT examines companies’ recruitment, induction and training practices and their relationship to the type of VET system. It covers two occupational fields in selected countries with school-based and dual VET structures. This provides insights into the contribution that companies make to transitions.

The type of VET system is associated with certain forms of recruitment, induction and training practices. For example time and measures of induction differ considerably by country and occupational field. Our data also show statistically significant differences in content of continuing training, particularly in technical professions. Considering the time investment in continuing training of a regular employee, the data indicate that in VET systems integrating work-based learning, this investment seems to be lower. Finally, in work-based VET, VET plays an important role as a recruitment instrument. Consequently, we can find strong arguments for employers to get involved in initial VET that incorporates work-based learning and illustrate its contribution smooth school-to-work-transitions.

Partnerships to promote school to work transitions – evidence from the field.
Hitendra Pillay Jim Watters, Steve Hay, & Lutz Hoff
Queensland University of Technology

Internationally, vocational education and training (VET) is challenged by increasing skills shortages in certain industries and rapidly changing skill requirements. Rigid and centralised state bureaucracies have proven inadequate to adapt to these challenges. Increasingly, partnerships between schools and industry have been established as a potential strategy to address local labour market demand and to provide school to work transition programs. Drawing on experiences in Australia, this paper reports on a case study of government-led partnerships between schools and industry. The Queensland Gateway schools initiative currently involves over 120 schools. The study aimed to understand how partnerships were constructed in this initiative. Selected partnerships were analysed in terms of the following principles of public-private partnerships - efficiency, effectiveness, sustainability, and beneficiaries. Although there are some benefits of partnership activities reported by both school and industry stakeholders, little evidence was found that the above underlying principles had been addressed to a significant extent in the Gateway school initiative. Further, these partnerships are often tenuously facilitated by individuals who have limited infrastructure or
strategic support. Implications are that project stakeholders have not sufficiently accommodated theoretical perspectives on implementation and management of partnerships. Similar initiatives may be improved if stakeholders are cognisant of the underlying principles supporting successful public-private partnerships.

3.5 'Education and training for intermediate level jobs in healthcare: navigating fragile and contingent pathways'.

Alison Fuller, University of Southampton, Lorna Unwin, Institute of Education

Our recent study exploring the role and meaning of intermediate level work within the United Kingdom’s (UK) healthcare sector sought to make visible the complex and evolving range of responsibilities and levels of expertise of people working in what we came to call the ‘intermediate space’. Technological advances have facilitated the standardisation of a range of medical and other health-related tasks, allowing them to be classified as routine and to be devolved downwards. Thus, healthcare provides a rich terrain for investigating changes and continuities in the education and training, and recognition of intermediate level staff. The research included a mapping of education and career pathways in a range of healthcare occupations and key informant interviews (professional bodies, employers, employees, trade unions, and education and training providers) in four areas: Maternity Support; Radiography Support; Healthcare Sciences; and Dental Technicians. We argue that contextual factors and traditional binaries based on assumed and long-standing notions of a workforce divided into ‘registered’ and ‘unregistered’, ‘professional’ (‘qualified’) and ‘non’ professional grades (‘unqualified’) and are undermining the development of intermediate posts articulated with clearly defined and well-understood education and training pathways. We suggest that lessons for policy reform can be learned from the example of dental technicians which, as a statutory registered occupation requiring approved and accredited training, provides a sharp contrast to the other occupational areas.

Youth apprenticeships in Canada: on their inferior status despite skilled labour shortages.

Wolfgang Lehmann, University of Western Ontario

Most Canadian provinces have introduced high-school-based youth apprenticeship programs to provide alternative educational pathways for young people, but also to address pressing shortages in skilled labour. Youth apprenticeships are promoted as an educational alternative that leads to the development of important and valuable skills, allows for the opportunity to earn an income while learning, and to gain a head start into lucrative, creative, in-demand careers. Despite significant growth in these programs over the past two decades, they have remained very marginal and continue to be perceived as being of lower-status compared to traditional post-secondary educational pathways, such as university or community college. In this paper, we draw on interview data with former youth apprentices in the provinces of Ontario and Alberta, about their reasons for entering apprenticeships in high school, their experiences in them, and their own perceptions about the status and social recognition of apprenticeships. The data show that a lack of regulatory frameworks
leads to vastly different apprenticeship experiences. Furthermore, we found that apprentices with prior connections to the trades usually use their networks to secure better placements and thus have more positive learning experiences. As we are concerned about status issues associated with apprenticeships, we discuss how apprentices’ diverse experiences affect their own perception of the status of their work and employment in the trades generally. In our conclusion, we suggest that policies regarding apprenticeship programs in Canada need to expand their focus. While emphasis is currently placed on recruiting students by highlighting relatively utilitarian benefits (e.g., earning while learning), we argue that more focus needs to be placed on the roles and responsibilities of employers and the integration of apprenticeships (and apprentices) in corporate structures and hierarchies. Such shifts have the potential to improve the experiences of apprentices and also address the status inferiority currently associated with apprenticeships.

3.6 The individual consumer of Australian VET – a very recent apparition.

Donald Zoellner, Charles Darwin University

Late 20th century European active social policy found a comfortable home in the Antipodean ‘workers’ welfare state’ and its preference for employment over social welfare benefits. To be an Australian is to be a worker and being a worker imposes consumer roles upon individuals. The citizen-workers of Baudrillard’s ‘consumer society’ are compelled to use their income consuming goods and services to ensure economic prosperity and, also, to consume VET in order to be a worker. This second consumptive position has only recently appeared in the National Training System. By analysing the productive capacity of Foucault’s conception of power/knowledge, this paper provides a narrative summary of the transformation of VET students from generic products of the system to individual consumers using an exhaustive review of policy documents and interviews with key policy contributors. The national effort to construct the lifelong citizen-worker-consumer will invoke control technologies such as the Unique Student Identifier, income contingent loans and a student entitlement to training for every 15-64 year old in the nation. With so-called student-demand driven training, costs will ironically be shifted from government and industry to recently observable consumers.

Never mind the equality, feel the limits: initial teacher education and the emancipator project.

Ian Rushton, University of Huddersfield

There is a counter-hegemonic literature that invokes a liberating, emancipatory pedagogical approach to teachers’ work and which tends to invoke a philosophical discourse which calls for a fundamental review of the nature and purposes of education. Likewise, there is growing body of adherents who espouse the centrality of critical theory as a research-oriented approach to revealing and contesting the troubling dualisms that the Neo-liberal agenda threads through education policy and practice. Whilst compulsory schooling and adult education seem to be well served by the literature, the English Lifelong Learning Sector (LLS) plays only a cameo role in current discussions. This paper draws on findings from a longitudinal study of 146 part-time final year trainee teachers attending an LLS teacher education course in Morley Fletcher Chair Bill Bailey
the North of England. Drawing on the empirical data, the paper discusses both the extent to which the emancipatory agenda offers a liberating pedagogical approach in the sector and the boundaries that critical theory comes up against when trainees’ language, dispositions and perceptions are considered as contingent components of the social and political contexts of their teaching practice.

10.45am - Coffee

11.30am – 12.30pm – Plenary

Social Institutions & Discriminatory Norms – Implications for Gender Equality, Education & Employment in Practice

Aruna Rao: Director, Gender at Work

Around the world, countries and communities are making incremental progress toward gender equality and women’s rights in some domains – albeit in a world where social justice and equality are under threat – but there has been uneven progress in changing norms, rules and individual attitudes and practices that perpetuate gender discrimination. For example, despite rising girls’ primary, secondary and tertiary education enrollments worldwide, more women than men in the Global South live in poverty and work in insecure and low paid jobs. Pervasive discrimination undermines women’s voice and agency and their access to rights and justice and policy and institutional biases perpetuate women’s subordination. However, promising initiatives -- such as the SEWA Bank in India, the World Bank’s Adolescent Girls Initiative, and Gender at Work’s Dalit Women’s Accountability Initiative in India -- addressing both discriminatory norms and policy failures offer many insights for the design of education and training that facilitate transformational development for gender equality.

Linbury Room
Chair: Pete Sanderson

12.30pm – Lunch

1.45pm – 3.15pm Conference Papers: 4

4.1 Social dialogue, skills development and temporary migration of high skilled workforce from the CEE countries to the Western Europe .

Vidmantas Tūtlys, Vytautas Magnus University
Jonathan Winterton, Toulouse Business School

The volume, duration and patterns of the temporary migration of skilled population are largely influenced by the different macro-level factors of socioeconomic and institutional development of society. The aim of this paper is to explore how the regimes of labour market including social dialogue, training regimes and qualifications systems operate to facilitate or impede movement of workforce from Lithuania to the UK and/or Ireland.

The research will disclose the involvement of social partners in designing and implementation of the socioeconomic and educational policies related to migration, as well as the approaches of the temporary migrants living in the UK or Ireland to the participation in the local trade unions and social dialogue. There will be also explored the implications of the processes in the national system of qualifications in Lithuania to the migration decisions of the citizens. The research methodology is based on
Skilled Migration, Adult Education and Deskilling in Canada: examining the connections.
Bonnie Slade, University of Glasgow

This paper draws on completed qualitative research on employment-related adult-education programs in Canada. While the Canadian government has been successful at recruiting highly educated migrants, immigrants tend to have poor labour-market outcomes. Research has consistently revealed that immigrants tend to be underemployed, unemployed, or working in unrelated jobs for economic survival. Educational policy has responded to the issue of deskilling by developing programs to help immigrants improve their employment outcomes by addressing labour-market barriers such as unfamiliarity with occupational-specific language, lack of social networks, and lack of local work experience. Adult educators and policymakers have responded by developing programs that aim to facilitate immigrants’ entry into the workplace, often through the use of unpaid work placements. In these programs, local work experience is used as a marker of difference whereby immigrants, because of their lack of local work experience, are deemed inferior to other workers. The result of this classification is the continuing feminization and racialization of the labour market, with immigrants over-represented in precarious employment relations despite their superior educational credentials and international work experience.

4.2 Reflexivity and Learning: the experience of former apprentices in higher education
Harriet Dismore, University of Southampton

Apprenticeship progression has received increasing attention during the last decade. This is partly due to the ambition set out in the 2006 Leitch report that in England 40% of all adults need to be qualified at level 4. Despite this, only low numbers appear to progress from non-academic routes to higher education (Smith and Joslin, 2011). A small number of projects have concentrated upon improving aspirations, like those carried out by Lifelong Learning Networks (LNNs) and Aimhigher (Thomas et al. 2012). However, no study has specifically investigated attitudes towards learning of those that complete the transition to higher education.

Nineteen individual interviews were carried out with former apprentices in higher education across the south of England. Reflecting a critical realist approach, the results were analysed with reference to modes of reflexivity as described by Archer (2007). It was then possible to review the data to identify patterns and anomalies. Preliminary findings show that attitudes towards learning could be mediated by both personal powers and socio-cultural factors. However, as Dyke and colleagues (2012) found, participants presented different modes of reflexivity depending on the context. From this paper emerges a complex picture relating to learner identity, work-related learning, student experience and
transition that can inform future research.

‘I came here to learn engineering not German’ Are University Technical Colleges bridging the academic/vocational divide?
Debra Malpass, Hayley Limmer, AQA

Women are under-represented in engineering jobs and in 2012 girls represented only 8.5% of students studying for the engineering Advanced Diploma, and 6.1% of students studying GCSE engineering. Nevertheless, the girls who choose to study engineering out-performed their male counterparts. Introduced in 2010, University Technical Colleges (UTCs) provide a pathway combining academic, technical and practical learning. They offer students aged 14-19 the opportunity to study a unique curriculum designed by employers, Universities and FE colleges. The majority of UTC’s specialize in engineering. Girls form a minority group at engineering UTC’s so this paper explores their day-to-day experiences of studying within this new educational context. The paper draws upon focus group discussions with girls studying engineering in Years 10 and 11 at UTCs. The discussions consider why girls choose to study engineering at a UTC and their experiences of studying a technical subject in a male dominated learning environment. It also examines whether they recognize gender stereotypes within the field of engineering and explores how any stereotypes might impact on their learning experiences and career aspirations.

4.3 Policies, pathways and partnerships: How effective is VET in Schools in supporting the transitions of young Australians?
Kira Clarke, Melbourne Graduate School of Education, University of Melbourne

Vocational Education and Training in Schools (VETiS) is playing an increasing role in the senior secondary education of Australian young people. Large numbers of students in their final years of schooling are using and relying on VETiS programs to not only facilitate their school completion but also to enhance their successful transition to jobs and further study. Policymakers and schools are expanding VETiS provision in attempts to improve retention and completion rates amongst senior secondary students. While models of provision of VETiS vary across Australian states and between schools, a common theme is the inherently cross-sectoral nature of VETiS programs which involve input from schools, vocational education and training (VET) providers, industry and system authorities. The effectiveness of VETiS is further complicated by contested purposes of VETiS at system and school levels, and the uneasy fit of VETiS within structures of senior secondary education. This paper draws on findings from a current three-year National Centre for Vocational Education Research (NCVER) funded study of models of VETiS. The presentation will use insights from policymakers, teachers, students and industry stakeholders to illustrate how Australian policies for VETiS are enabling and/or constraining the pathways and partnerships necessary for effective youth transitions.

Vocational Education in times of crisis
Charlotte Jonasson, Aarhus University

Vocational education in school has in several studies been considered a secondary ‘choice’ to academic education and to apprenticeship or
workplace learning and has, thus, been considered merely a prerequisite for obtaining a qualification, or has involved high percentages of student dropout (Lamb et al. 2011; Swift and Fisher 2012). However, recent research has shown how teachers with vocational occupational backgrounds through ongoing dialogue with the vocational communities of practices are able to create a bridge for students between school and work and thereby make students interested in vocational school beyond demands of qualifications or lack of choice of an academic education (Higham and Farnsworth 2012). Findings from a field study conducted at a Danish vocational school show how similar efforts of supporting students’ interest in vocational schooling rest on complex processes of building interpersonal trust within the school between students, teachers, and leaders and institutional trust in vocational schools in a broader political and societal field. It is suggested that such building of trust is needed in order to be able to handle uncertainties related to vocational education facing problems with student dropout, lack of apprenticeship places, and a decline in student entrances.

4.4 Career Transitions and Lifelong Learning

Antje Barabasch, Cedefop & Alan Brown, Warwick University

This study investigates how adults established in their careers are navigating their ways through changing labour markets. It focuses upon how skilled workers have engaged with or chosen different forms of learning (including learning at work as well as in more formal settings), guidance and other support in order to develop their current set of skills and competences and overcome barriers to career progression. The study examines the different patterns and pathways individuals follow in their career development in Denmark, France, Germany, Italy and Spain. A central question for this study is how learning can support workers’ continuing transitions in the labour market. The research generates a deeper understanding of the many dimensions underlying individual approaches to career transitions and learning, which will be illustrated in a theoretical model. The results of the study further inform about the ways in which adult and work-based learning can help people to better manage careers and working-life transitions. The five countries were chosen to represent very different approaches in relation to policy strategies, laws and regulations which frame their national contexts and the factors that affect the ways in which learning supports labour market transitions.

Internship as workplace skill formation: models from the Creative and Finance Sectors.

David Guile, Institute of Education

Internship has been the subject of a devastating critique by Perlin in Intern Nation (2011) on the grounds that they are exploitative and do not offer interns any worthwhile outcomes for their free labour. The aim of this paper is to rescue the concept of internship from its current highly negative press by distinguishing between: a) internship as a model of skill formation; and, b) forms of unpaid and unsupervised work experience offered by many employers that Perlin and many commentators in the UK describe as internships. Based on the premise that internship, like work in
which it is embedded, and learning which it can facilitate, is a form of social practice, the paper will be based on research undertaken in the UK’s Creative and Finance sectors: (i) present two models of internship as skill formation; (ii) reveal the way in which they facilitate learning and skill formation in decentralised and distributed settings; (iii) identify why internship raises questions about the merits of the ‘key’/‘employability’ skills agenda as a vehicle to facilitate transition into the labour market; and, (iv) argue there is a parallel between apprenticeship and internship as models of skill formation and that this raises new questions about how to address academic-vocational divide in Further Education in the UK.

4.5 Retail sector competencies: A common European pedagogy?

Michaela Brockmann, Slawomir Kurek, Matthias Pilz, Tomasz Rachwal, Arti Saraswat and Sabrina Theis

In many European countries, young people are increasingly deemed to lack ‘readiness’ for vocational education and training (VET), particularly in relation to social and personal competencies. This is of particular concern to the retail sector, where these competencies are among the key identified skills gaps (e.g., Skillsmart, 2011). The Leonardo-da-Vinci study ‘Retail Sector Competencies’ aims to enhance the social and personal competencies of young people on vocational programmes in retail through an ‘Innovation Transfer’, whereby a set of relevant teaching materials originally designed for German secondary schools is being adapted and transferred to the context of retail programmes in vocational schools/colleges of Further Education in four countries: Germany, England, Poland and Italy.

Based on initial findings, the paper discusses the challenges of implementing standardised material into contrasting country-specific VET contexts. On the one hand, while social competencies are highly valued in all four countries, the findings reflect the different VET models (e.g. Anglo-Saxon vs Continental), and the underlying principles, practices and structures (Author 2012). On the other hand, the perspectives of individual stakeholders, such as teachers and students, partly contradict these dominant models. Implications for policy, e.g. in relation to European initiatives towards harmonisation of VET, are discussed.


In this paper, we engage with the issue of emancipation in VET practices. In particular, we explore Uruguayan VET practices that aim at preparing students for a life as a skilled worker. In the context of vocational education and training policies, the notion of emancipation has been mainly associated with and discussed in terms of a means-end activity; that is: the capacity of VET programs to empower students to take part in the labour market, and through this, to promote inclusion of those who belong to disadvantaged groups of the population. In this regard, the issue of emancipation in VET practices has been mainly associated with labour-market inclusion and, indirectly, with social inclusion. In this paper however, inspired by the theoretical traditions of Freire and Rancière, we approach the term emancipation from a perspective that goes beyond the transmission of knowledge and skills to become qualified
and/or socially and work included. For both authors, emancipation is not exclusively achieved through inclusion into the existing order. Both Freire and Rancière, though in different ways, put the questioning of this existing order central in their critical reflections. Drawing on the results of our observations and analysis of Uruguayan VET practices, we aim at understanding better the relevance of the distinct contributions of Freire and Rancière to the theoretical debate on emancipation and, in line with this, of the emancipatory potential of VET practices.

4.6 Exploring the underlying assumptions and threats to validity in Work-based Observational Assessment: views of key practitioners

Milja Curcin, Tom May, Zeeshan Rahman and Andrew Boyle
The City and Guilds of London Institute

The study presented in this paper was part of a larger project developing a validation framework for Work-based Observational Assessment (WBOA), carried out by the current authors on behalf of City & Guilds under contract to the Office of Qualifications and Examinations Regulation (Ofqual) as part of the latter’s Assessment Validity Programme 2012. The focus was on WBOA since there is little research-based literature on it, despite its widespread use in competence-based Vocational Qualifications (VQs). In this paper, we present and discuss the views of assessors, internal and external verifiers involved in WBOA regarding its underlying assumptions and potential threats to validity. These were identified based on a review of WBOA features and practices, as well as performance and competence-based assessment generally, and outlined in the argument-based validation framework developed specifically for WBOA as part of the same project. The data were collected through a questionnaire (496 respondents across a range of VQ sectors) and one-to-one interviews (18 respondents from Hairdressing, Electrical Installation and Plumbing). We found overall support for several key facets of validity in WBOA, but also, occasionally, substantial dissenting minorities. We give several examples of contentious issues and argue that the relevant assumptions should be thoroughly investigated and the corresponding practices amended where possible in order to reduce the chance of WBOA producing invalid results.

Delivering on the VET promise: a review of VET within the contemporary Australian Comprehensive schooling system.
Paul Rodney, Catholic University, New South Wales

Vocational Education and Training has been offered as part of the senior school curriculum (post-compulsory) offering in Australian comprehensive high schools for over two decades. It has been refined, enhanced, broadened and repackaged; nonetheless, it may not have delivered on expectation (i.e. its promise). Whilst acknowledging the good will, best intent and significant resource input, it is questionable if senior school structures, curriculum, provision and recognition in Australian comprehensive high schools have been able to deliver on the ‘VET promise’ for school-delivered VET, that being: rigorous, high quality, coherent, relevant, engaging, founded on integrity, post-school recognised, non-streamed and non-streaming (explicitly or implicitly), for all students, workplace recognised, able to link work and schooling,
comprehensive, able to provide multiple pathways and able to delivery on many more noble intentions. The paper makes judgement on the delivery or not of the ‘VET promise of the 1990’s’ in contemporary Australian comprehensive high schools.

Using large quantitative analysis techniques, the research finds that VET delivery has become widespread whilst failing to become an equal mainstream choice with enrolments and outcomes aligned to social differences despite the best intent to address such issues over time. The re-introduction (after being phased out in the 1960s) of technical schools (Australian Technical College, Trade Training Colleges and the like) as alternatives to the contemporary comprehensive high school may signal the failure of such to cater appropriately for VET (delivery on the ‘VET promise’) in the modern era.

3.15pm - Tea
3.45pm – 5.15pm - Conference Papers: 5

5.1 Globalising Student Success
Carol Dennis, University of Hull

Drawing loosely on ideas connected to network theories and critical realism, this paper places two key policy papers alongside each other: one from the USA - 'The Heart of Student Success' and the other from the UK 'How Colleges Improve' to explore the ways in which the writers' position themselves, students and teachers in relation to the quality of post secondary education. Operating at a distance from sites of pedagogic practice, the writers of both texts presume an authority that enables them to inform those working in colleges about how best to conduct their professional lives; this positional similarity aside, the texts are quite different. One adopts a seductive strategy that romanticises the pedagogic encounter; the other adopts the punitive voice of a strict father. Whether these differences are more than superficial depends on the readers willingness to conflate medium and message. Arguably it is the points of similarity that matter most - as educational goods are defined by what is successfully filtered through the obligatory passage point of the economic, leading to both documents preserving a diminished pedagogy and a demonised teacher. However the differential silences in each document presents the reader with rich potential for new sites of resistance in a continuing struggle for the soul of the teacher.

Why students enrol in VET – South African FET College students
Lesley Powell and Simon McGrath, Nottingham University

The policy ambition to expand student participation in South African Further Education and Training (FET) colleges has put pressure on college management to find effective ways of marketing the college and recruiting students. As a result, colleges have committed substantial resources to the development of marketing strategies and marketing units. Despite the goal of expanded participation, very little is known about why students enroll at FET colleges. Lacking such an understanding may result in a mismatch between the political ambition to expand participation in FET colleges and the resultant enrolments. It may also result in a misunderstanding of what students are looking for and need
from the education and training provided by the college. Drawing on research undertaken with students as part of my PhD study, this paper examines the reasons that students enroll at FET colleges. Drawing on Margaret Archer’s work, these are analyzed in terms of the agency which students used to enroll at the college and the opportunities available to students at the time of enrolling. The central argument is that learners enroll at FET colleges for a range of complex reasons which belie the age old adage that students elect FET as second choice institutions.

5.2 Vet practitioners views of their necessary qualifications, Len Cairns, Monash University, Australia.

This paper reports on a small study in the state of Victoria, Australia which will form a part of a larger International Study during 2013, which seeks to explore the qualifications VET practitioners see as necessary and sufficient to engage as VET teachers. Interviews of VET practitioners across a range of fields has sought to gain an insight as to what people engaged as current VET practitioners see as a basic qualification and what aspects of further professional development, pedagogical considerations and quality issues they identify win relation to the system acceptable basic qualification in Australian VET teaching (Certificate 4 level study). In addition, interviewees were also asked about the balance between craft and experience and adult learning theory in relation to their teaching. The paper will report on the interview data and lead discussion on practitioner views and teacher educators’ perceptions of the findings.

5.3 Adoption of vocational curriculum changes by vocational teachers. Krista Loogma, Tallinn University.

The paper aims to explain how the vocational teachers have experienced the process of implementation of the national vocational curricula. In the paper we review the process of VET curricula reform in Estonia during the last 20 years and particularly the introduction of national curricula as part of the reform. As teachers should be considered as the key agents of curricula changes, we are looking at teachers’ reactions/attitudes towards curricula changes. 25 qualitative interviews have been conducted with vocational teachers, by choosing respondents from different vocational fields and with varying work experience. Resulting from the analysis five categories of teachers was identified: positive innovators, constructive-critical innovators, passive adopters, passive critics and bitterly disappointed. The Everett Rogers’ theory of innovation diffusion (Rogers, 2003) has been used as a theoretical framework that enables to explain the uneven adoption of curricula changes among teachers and different reactions to the possible changes in their work practices.

5.3 It’s an activity, not an event: understanding the conduct and meaning of teaching observations in the initial development of vocational teachers. Anne Lahiff, Institute of Education

This paper draws on case study research which focuses on the teaching observations conducted as part of vocational teachers’ initial teacher training (ITT) in England. The research aims to further develop
understanding of the processes involved in the observation of teaching, with the aim of improving practice and, ultimately, enhancing the learning experiences of vocational students. The research centres on five vocational areas - catering; health and social care; specialist make-up for theatre; plastering and painting and decorating. Observation of the processes involved in conducting teaching observations was followed by in-depth interviews with participants in the process: vocational teachers, education tutors and vocational mentors. Categories from Cultural Historical Activity Theory (CHAT) have been used to frame the research methodology and subsequent analysis. Key issues to be explored in the paper include the form and significance of the mediating role of artefacts in the observation process; the contribution made by the observation feedback discussion to vocational teachers’ learning and the relevance of physical context to vocational learning.

Matters of complexity: an analysis of the dilemmas and tensions faced by teacher educators from the Lifelong Learning sector when using modelling with student teachers from vocational settings.

David Powell, University of Huddersfield

Modelling is a teaching method employed by teacher educators to demonstrate, explain, debate and theorise their practice and so support the learning of their student teachers. Although using modelling is judged to be a highly effective strategy and considered one of the roles and professional competencies of a teacher educator (Korthagen et al. 2005; Loughran and Berry, 2005), Lunenberg et al. (2007) concluded that there is little evidence to suggest that teacher educators fully recognise or utilise it as a teaching method. The focus of this paper is the initial findings from a collaborative action research project between the author and a team of teacher educators from a general further education (FE) college who are seeking to use modelling with their in-service student teachers. Using an approach based on Winter’s (1982) concept of dilemma analysis, the paper discusses the tensions, complexity and contradictions that exist when using modelling with student teachers from vocational settings. Thus, it focuses on the impact a teacher educator’s professional identity has on their pedagogical decision making (Noel, 2006, Lunenberg et al. 2007, Boyd, 2011), the impact ‘organisational field’ has on practice, and what types of modelling are being used by these teacher educators.

5.4 ‘Should I stay or should I go?’: exploring high school apprentices’ pathways

Alison Taylor, University of Alberta

Provincial high school apprenticeship programs in Canada are often seen as providing an alternative pathway for youth who may not otherwise complete secondary school to earn a diploma while gaining useful work skills that are in high demand. But little evaluation of training and employment outcomes has occurred. This paper draws on data from 25 interviews and 173 surveys with former high school apprentices in the provinces of Ontario and Alberta to explore the question: why do youth complete or not complete apprenticeship training? Our interview data include only youth who discontinued their apprenticeship training, while survey data include completers and non-completers, allowing for comparison of these groups. In addition to
provincial differences, we explore differences in socio-demographic characteristics (e.g., parents’ education, gender) between ‘completers’ and others and also whether there were notable differences in their training experiences. Keeping in mind that non-completion is not always a negative outcome, we attend also to the subsequent education and career decisions of ‘non-completers’. This discussion has implications for youth and other partners in high school apprenticeship programs, and more broadly, for policy discussions about high school apprenticeship.

Interconnected or disconnected: the disappearing dream of a tertiary education system in Australia.

Andy Smith, Ballarat University

Since the election of the federal Labor Government in Australia in 2007 and the release of the “Bradley Review” of higher education, the Australian government has pursued a policy of creating a more integrated tertiary education system through promoting higher levels of interaction and o-operation between higher education and VET providers. Whilst the concept of a fully integrated tertiary system was never suggested by the Bradley Review, policy development in both higher and vocational education at the federal level has strongly encouraged the development of more “joined up” or “interconnected” tertiary provision. The introduction of demand-driven funding in higher education, the setting of targets for the attainment of degrees and higher level VET qualifications and the creation of infrastructure funding programs for Universities and Technical and Further Education (TAFE) Institutes created powerful incentives for universities and TAFE Institutes to collaborate very closely to increase provision. In recent years, however, a threat to the development of the interconnected tertiary system has emerged with the adoption of radical policies for the funding of VET by State governments, now increasingly controlled by the Liberal-National Coalition parties. These policies include the defunding of training for many occupations not deemed to be of “economic worth” to the State and have targeted the public funding of TAFE Institutes in particular. This paper will explore the new approaches to VET funding adopted by Australian State governments and discuss the implications of these new policies for tertiary provision in Australia.

5.5 Age Management in Practice: improving access to VET/CVET for older workers across Europe.

Graham Smith, Strathclyde University

Europe’s population is ageing. While improvements in fertility rates have been observed over the last few years, the number of older adults continues to outgrow younger people resulting in a greater number of older workers than ever before. Over the last decade there has been a general increase in the employment rates of older adults across Europe, yet participation in VET/CVET among adults over the age of 50 remains low, with disproportionate numbers of younger people accessing and benefiting from VET than older adults. The Age Management in Practice (AMaP) project is a collaborative partnership involving organisations from Germany, Greece, Poland, Portugal, Sweden and the UK. Funded by the Leonardo da Vinci programme, AMaP aims to address the challenge around access to, and participation in, CVET among older workers aged 50 and over, while increasing awareness of the European
Qualification Framework (EQF). An EQF ‘Mapping’ tool has been developed to recognise the validity and value of the human capital of older workers, and further aims to increase confidence and motivation and encourage older workers to actively (re)engage in CVET. This will be field tested in the spring of 2013 in Portugal, Germany, Poland and the UK.

Liz Atkins, Huddersfield University

Vocational programmes at the lowest levels have been subject to significant criticism, not least from Government sponsored reports both before and after the last election (eg. Working Group on 14-19 reform, 2004; Wolf 2011). The Coalition government has, in common with earlier administrations, focussed policy initiatives on higher level and higher status vocational education. This paper explores the tension between this reality and the rhetoric of inclusion which forms much of the narrative of education policy. It considers this in the context of the implications of vocational education policy for the most marginalised young people: those with special educational needs and the poorest post-16 outcomes, who are engaged with vocational education at its lowest levels and who are ambivalently positioned between mainstream education and special educational provision. The paper suggests that whilst some recent policy initiatives, such as the introduction of University Technical Colleges and the proposed ‘Technical Baccalaureate’ may be successful in raising the esteem of some types of specialised vocational education, they will also reinforce different degrees of exclusion and inequalities within vocational education. It concludes that broad vocational courses at lower levels, held in low esteem and conferring little or no educational advantage, are likely to persist in the absence of any proposals for a meaningful alternative. Finally, it calls for concerted action in terms of both research and curriculum development to which could lead to more meaningful education at this level.

5.6 Vocational Learning in the Extended Project Qualification – a chance encounter or a happy coincidence?
Faith Muir, University of Warwick

To what extent is the Extended Project Qualification (EPQ) a suitable medium for effective post-16 vocational learning, given that it is generally regarded as an ‘academic’, Level 3 qualification? In what ways is it already being used for this purpose? The EPQ’s overarching aim is to stretch and challenge advanced students through completion of ‘a single piece of work, requiring a high degree of planning, preparation and autonomous working’ (DfES, 2005:60). Favoured by HEIs and teachers alike (Ipsos/Mori, 2012) for developing study skills and information-handling (Whittle et al, 2010) it emphasises personalised learning, with candidates making a major input into project choice and design. The qualification is a significant element of 14-19 curriculum reform and has seen rapid growth in popularity over a short time. Arising from ongoing doctoral research, this paper examines evidence from two centres in England – a girls’ school specialising in engineering and a 6th Form College – where the EPQ has been offered as a stand-alone
qualification since its introduction in 2008. In both cases, the annual EPQ candidate numbers are substantial (combined total: c.800) and identification / exploitation of opportunities for vocational learning – knowledge and skills – are actively encouraged as a means of preparation for employment and higher level study.

The Use of graphic pictorial teaching strategies to enhance visualisation skills in sketching fashion style. Daliliah Rubi, Sultan Idris University, Malaysia

This study aims to identify the use of pictorial graphic teaching strategies in order to enhance the visualization skills to sketch fashion style. The main objective of the study is to investigate the effect of the use of picture to enhance pre service teachers’ competency in men’s garment making based on certain criteria. This study employed action research design by using qualitative document analysis. Data for qualitative document analysis were gathered from pre service teachers’ score on identification test, sketching tasks and exam. Data were analyzed using descriptive statistics (T-test pair). The respondents consist of 48 pre service teachers in fourth semester, taking Men’s Garment Making course (VCD3073) at Sultan Idris University of Education (UPSI) in Malaysia. The findings revealed that there was an increase in visualization skill of sketching fashion styles in terms of proportion and colour elements using a graphic picture given with the mean score of final exam is higher than the identification test (2.87>M>4.58). As for colour element, the mean score for identification test was slightly lower than in final exam (3.56>M>3.65). Through paired sample t-test, there was a significant difference found between mean scores of each variable in three interventions. Overall, the use of graphic picture is an intervention that can be continued and should always be given modifications and improvements to enhance its effectiveness.

5.30-7.00pm

6.1 ‘Further Education (FE) teachers with occupational experiences: how they apply their knowledge in teaching’. Sai Loo, Institute of Education

Drucker (1993) coined the terms “knowledge work” and “knowledge worker” to describe a new style of working and a new type of worker in the knowledge economy respectively. This paper centres on a specific type of workers - creative knowledge workers - who perform their work in the knowledge economy and the implications for stakeholders from the perspectives of learning and working. Admittedly, there are different types of workers but not all of them are creative knowledge workers. Two research methods were used namely: semi-structured interviews of creative professionals and academics in two sectors (advertising and information technology (software)), and circumscribed reviews of relevant literature. The theoretical framework is drawn from the disciplines of economics, management, sociology and psychology. It uses an inter-disciplinary and relational approach to link the three topics. This paper uses a case study of a creative knowledge worker – creative director in the advertising sector – to illustrate this new working style. The contributions of this paper consist of: 1) a definition of creative knowledge work, 2) a
conceptual framework to analyse this type of work, and 3) implications at three levels: micro (people); meso (group and organization); and macro (societal).

Worshipping in the temple of now: toxic time demands experienced by trainee teachers in further education
Gillian Bailey, University of Huddersfield

This paper examines the experience of students as they train to teach in an era of ‘fast education’. Drawing on ethnographic data from a PGCE programme, it considers the way in which target-driven college cultures, with their emphasis on results, create an academic year punctuated by assessment points and driven by the need to achieve high grades. In addition, curriculum change, a culture of learner-centredness and the demand for increased workplace flexibility, have intensified, multiple demands on teachers’ personal and professional time. I will consider how this has resulted in the commodification of time and the worship of speed, with teachers being expected to work fast so that more can be squeezed into limited amounts of time: prescriptive specifications and assessment schedules have been compressed into tighter time frames, while teachers have been required to respond to an increasing number of curriculum revisions and educational initiatives. Applying social theories of time, I will argue that education is being squeezed into temporal frameworks which exert toxic time demands on teachers and which foster, in students, a culture of instant gratification which puts at risk the value of slow thinking in education.

Linbury Room. Chair: Beatrix Niemeyer

6.2 Girls experiences of studying engineering at a University Technical College.
Hayley Limmer and Debra Malpass, AQA

Women are under-represented in engineering jobs and in 2012 girls represented only 8.5% of students studying for the engineering Advanced Diploma, and 6.1% of students studying GCSE engineering. Nevertheless, the girls who choose to study engineering out-performed their male counterparts. Introduced in 2010, University Technical Colleges (UTCs) provide a pathway combining academic, technical and practical learning. They offer students aged 14-19 the opportunity to study a unique curriculum designed by employers, Universities and FE colleges. The majority of UTC’s specialize in engineering. Girls form a minority group at engineering UTC’s so this paper explores their day-to-day experiences of studying within this new educational context. The paper draws upon focus group discussions with girls studying engineering in Years 10 and 11 at UTCs. The discussions consider why girls choose to study engineering at a UTC and their experiences of studying a technical subject in a male dominated learning environment. It also examines whether they recognize gender stereotypes within the field of engineering and explores how any stereotypes might impact on their learning experiences and career aspirations.

Increasing students’ entrepreneurial spirit on a home economics study programme by using a business incubator.
Sicilia Sawitri, University of Indonesia.

The goal of this research is to create Incubator Business as the embryonic of entrepreneurship in fashion in Home Economic Study Program. By creating the Incubator Business, the student’s entrepreneurial spirit can be increased. The method were used in this research is R & D. By using questionnaire the data were collected. The data analyzed was percentage descriptive and result were: There were
increasing entrepreneurial skill and spirit (before the treatment the entrepreneurship spirit 0.72 and the skill 0.63, after the treatment increased 0.84 and 0.93). The conclusion is created an incubator business in the Home Economic Study Program as embryonic development of entrepreneur in fashion field. This program could increase student’s creativity and entrepreneurial skill. The suggestion for the Home Economic Study Program and Engineering Faculty, were: (1) The Incubators Business needs a special room to do the activity, (2) Need coordination simultaneously from the PKK Study Program to give the permission to the students who was assigned to the Business Incubator Program.

Memorial Room. Chair: Ann Harris

6.3 Insights into contextualised learning.
Martin Johnson and Beth Black, Cambridge Assessment

This study looks to build on a research tradition that uses naturalistic methods to evidence the tacit practices that exist in workplace social interaction practices. Using the community of practice metaphor, this project explores some of the characteristics of learning that take place when a group of professional examiners engage in joint-work activity in both face-to-face and virtual contexts. Professional examiners are all subject experts and the essence of their work, reinforced by the hierarchic structures that organise their working relationships, mean that examiner ‘learning’ involves the convergence of understandings of less senior examiners with those of other more senior examiners around key concepts. This project looks at how more senior examiners help to induct other examiners into ways of thinking within a professional community. It also looks at the role of boundary objects, such as mark schemes and exam scripts, which help to coordinate different perspectives within the community. Focusing specifically on the feedback that senior examiners give to less senior examiners in their team, this study uses a mixture of video and direct observation methods, interview, and text analysis techniques to look at how shared meanings can be built through social interaction in an applied work situation.

‘Rule of Thumb Methods no longer suffice’: the relevance of the history of coal mining education to contemporary policy.
Martyn Walker, University of Huddersfield

The paper looks at the historical developments of British mining education and training, particularly following nationalisation of the industry in 1947 until the mine closures of the 1980s. The research provides evidence that the qualifications offered and funded by the National Coal Board, such as electrical engineering, mechanical engineering and surveying, were not only relevant to the industry and supported a career in coal mining, but they also provided transferable skills and expertise which were attractive to other industries as well as the tertiary sector. Interviews carried out by the author with former mine workers provides insight into their professional development with regard to the qualifications they undertook. These qualifications, from First Certificate (which was compulsory for all new employees in the Coal Industry) to BSc degrees, were underpinned with English, mathematics and science. The paper also briefly identifies the depth and variety of subject content found in each qualification at each level, highlighting the much sought after transferable skills; something twentieth-first century curricula developers should take into account when designing work-based qualifications for employability in a changing World.

Ruskin 1. Chair: Martin Johnson

6.4 Productive systems and professional formation: early years and HR professionals.
Jim Hordern, Institute of Education
Professions may establish a range of pathways through professional formation, usually incorporating variable combinations of formal study, workplace practice, assessment and accreditation, and the development of these pathways often involves a range of actors and organisations, including professional bodies, educational institutions, employers, government and practice networks. The notion of the productive system, involving an analysis of the articulation of the structure and stages of a productive process (Wilkinson 2002, Felstead et al. 2009), can be used to identify the dynamics of influence and the development of mutual interests within a system of professional formation. Processes within the productive system can also be seen as structured and legitimated by notions of mutually constituted or externally mandated ‘appropriateness’ (March and Olsen 2004), the norms and customs of the profession, relations with other occupational groups and the wider socio-economic context. This paper provides a profile of the productive systems of early years and human resource professionals, exploring routes towards professional formation, identifying the potential impact of the productive system on processes of knowledge recontextualisation within the variable contexts of learning and work, and asking if and how practitioners can exercise greater control over the productive systems of their formation.

Trust and expertise in the new division of labour in human services: implications for learning at work.
Pete Sanderson, University of Huddersfield

The management and delivery of human services is becoming increasingly fragmented, dominated by structures which may be understood in terms of Miriam Glucksmann’s reconceptualization of the Division of Labour. Glucksmann’s framework directs our attention to the way in which divisions of labour are characterised not simply by vertical and horizontal specialisations determined by Taylorist techniques and technical specialisation, but also by the shifting boundaries between public and private sphere, between State and Market and between producer and consumer. These transformations both disrupt patterns of behaviour, trust and portfolios of expertise held by individuals and organization, and also demand new modes of learning in workplaces and the spaces between workplaces. This paper explores these themes in the context of general examples like task redistribution and the development of online services, and uses specific illustrative instances from the transformation of legal advice service work.

Ruskin 2: Chair: Pete Sanderson

7.45pm Conference Dinner

Sunday 7th July

8.15am-9.15am Breakfast

9.30am-11.00am - Conference Papers: 7

7.1 Developing reflective teachers through a pedagogy of space and place.
Sarah Williamson, Liz Dixon and Judith Kidder, University of Huddersfield

Linbury
Chair
Drawing upon ideas from art, literature and culture about how changing space from inside to outside can change thinking and perception, this discussion paper explores how trainee teachers might be encouraged to consider and develop their own perceptions about teaching and learning through outside space, landscape and environment. Ideas concerning ‘space’ and ‘place’ as neutral and transitional as well as contemplative, reflective and connective will be explored. The work of site-specific scenographer Louise Ann Wilson will be used to consider the value of a ‘period of immersion in a chosen place’ (2011), in addition to the concept of psychogeography. Some psychogeographical exercises to promote sensory focusing will be discussed, linking to Mason’s (2002) ‘discipline of noticing’ as a teacher and researcher. Walking will be investigated as ‘a means of both creating new embodied ways of knowing and producing scholarly narrative’ (Pink et al 2010:1) together with Cosson’s (2009) concept of ‘the walk’ as a pedagogical space to unravel and reflect on personal understandings. The paper will then evaluate how these ideas and approaches could be adapted by trainee teachers to support learning within their own subject contexts.

The importance of being earnest and – most importantly, clear.
Bettina Fuhrmann, University of Vienna

This paper explores three different components of instructional quality of the teaching process: the teacher’s didactical skills (like being able to give clear explanations), the teacher’s personal skills (like being earnest with the students) as well as classroom management. It also examines their effect on students’ global evaluation of teaching (SETs) by empirically testing a structural equation model. Potential biases on global ratings like the students’ interest in the subject and finding their teacher likeable have also been taken into account. The empirical results are based on a quantitative survey of 2,121 students who were asked to evaluate their accounting teachers. While the model shows that global ratings are slightly affected by the students’ interest in the subject matter, their attitudes towards evaluating their teachers as well as their teachers’ perceived likeability, it also reveals that SETs mainly depend on their teachers’ didactical skills in class, particularly their ability to give clear explanations, to answer their questions clearly and to give their lesson a clear and logical structure. Personal skills – though important for interacting successfully with students – do not contribute to the explanation of favorable SETs.

7.2 Vocational education Policy in the Baltic States after Independence.
Heidi Paju, Tallinn University

Vocational Education plays today mayor role in raising competitiveness of countries economy. Since the collapse of Soviet Union the educational system in the Baltic States had a rapid development driven by the urge to reach the level of western education systems. As a result of fast development the Baltic States have now functioning vocational education system and full financial support from European Union Social Fund. Despite of its prosperousness the development of Baltic States’ vocational education can be seen as somewhat blind following of European Union’s education policy. There is lack of understanding how the past is affecting today’s vocational education, what is the role of policy in vocational
education curriculum and how is vocational curriculum theory affected by our desire to forget the past. The aim of this paper is to contribute to our understanding of today's vocational education in Baltic States with exploring vocational education curriculum theory and highlighting the trends of vocation education policy. The research methodology is based on qualitative methods by conducting in-depth interview with policy-makers and content analysis of policy documents, curriculum and reports.

How to teach vocational education: a theory of vocational pedagogy.
Charlynne Pullen, City & Guilds of London Institute, Bill Lucas, University of Winchester

The City & Guilds Centre for Skills Development set out to provide a high-status and theoretically grounded perspective of vocational education by developing a vocational pedagogy. This research was conducted by Professor Bill Lucas, Dr Ellen Spencer and Professor Guy Claxton from the Centre for Real-World Learning at the University of Winchester. The research involved a literature review; an appreciative inquiry session with practitioners; and interviews with six experts: Lord Kenneth Baker, Principal Sally Dicketts, Lorna Fitzjohn HMI, Professor Richard Pring, Andy Smyth from TUI Travel, and Professor Alison Wolf. The report illustrates why vocational education is difficult, valuable and should be respected in its own right. We detail the outcomes of vocational education and the implications for teaching practice. We argue that vocational education must equip workers with six key outcomes: routine expertise; resourcefulness; functional literacies; craftsmanship; business-like attitudes; and wider skills for growth. The report also provides a robust and comprehensive framework for teaching vocational education. Our theoretical model will enable practitioners to plan their teaching on vocational programmes according to a thorough and tested framework. The outcomes and vocational pedagogy model are currently being tested with practitioners and we plan to provide specific examples in our presentation.

7.3 Higher VET – a new world between academic and vocational education?
Isabelle Le Mouillour, Ute Hippach-Schneider, BiBB, Germany

National systems of vocational education and training (VET) are constantly faced with new challenges driven by politics and economy. Some contend that qualification requirements on the labour market have changed to their disadvantage. The development of tertiary sectors, the request of higher qualification levels, increasing globalization are factors impacting upon the expected qualifications levels and the standards in education and training. One political strategy in response is to strengthen the university sector and raise participation rates. A further political strategy is to foster the development of higher VET, as equivalent to higher education qualifications. Based upon European comparative VET research, the contribution aims at discussing how far the development of higher VET is incremental to education and training systems and its consequences on issues such as parity of esteem between VET and higher education as well as access to the labour market for graduates. Specific questions will be addressed such as the understanding of higher VET in different European countries, the role of the European and national qualifications frameworks, the models and courses that stand out for the
integration of high-quality vocational and school-based/academic education as well as the expectations by enterprises.

Policy, professionalism and Pedagogy in vocationally focussed UK universities.
Jaswinder Dhillon, University of Wolverhampton

Universities have developed institutional and national schemes to promote innovation, excellence and professionalism in teaching in higher education in response to policy, an increasingly competitive environment and the pedagogic practices of their staff. This paper reports on the findings of an externally funded research project on teaching in UK universities which focus on vocational and professional education. The methodology used for the research consisted of a literature review, a search of university websites and an audit of teaching, learning and assessment practice. The audit was undertaken through a survey of 27 universities and follow up email conversations and telephone interviews to identify case studies of ‘innovative’ and ‘excellent’ pedagogic practice. The case studies, a sample of which were produced as video case studies, reveal the dynamism, innovation and diversity of pedagogic practice and the focus on employability which drives curricula and institutional policies of reward and accountability in the sampled universities. The picture presented through this externally funded project provides a stark contrast to some of the traumatic changes facing lecturers’ professional autonomy and working conditions in vocational and professional higher education.

7.4 Firm provided training during the Great Recession
Ute Leber, IAB Nurnberg

Even though the 2008/09 economic crisis had only minor employment effects on the German labor market, it might have affected firms’ further training and apprenticeship training behavior. From a theoretical point of view, we can find reasons for an increase of training during a downturn (e.g., declining opportunity costs of training) as well as arguments for a decrease of training (e.g., uncertain future benefits of training). The existing empirical evidence on the relationship between training and economic downturns is relatively scarce. By using data from the IAB Establishment Panel, a representative German panel data set with annual information about almost 16,000 establishments, we analyzed the further training and apprenticeship training activities in firms which were affected by the crisis and in those which were not. Our empirical investigation revealed that the firms, irrespective of whether or not they were hit by the economic crisis, decreased their further training and apprenticeship training efforts in 2009 compared to 2008. This might be a hint that it was primarily the general macroeconomic situation and not the firms’ individual involvement which affected the training decisions. However, firms directly affected by the great recession tended to reduce their training activities more often than those which were not affected. Furthermore, we found stronger variations in the development of firms’ further training activities than in the development of their apprenticeship training.

Apprenticeship in Britain and Italy: Laws, Policies and Practices
Lisa Rustico, University of Milan
This paper analyses apprenticeship-related policies of Italy and Britain in the past five decades. Both countries have recently promoted reforms inspired by the German dual model, but such measures have only partially met the standards of the German system, in terms of training quality and institutional support. Moreover, an increasing distance between rules and practices contributes to low transparency in both systems. This reflects the - partly similar - policy choices adopted by governments in Britain and Italy in the area of work-based vocational education and training. A broadly similar pattern characterises both countries, in which traditional apprenticeship declined, neglected by governments in favour of youth employment policies, but has recently become the principal vehicle for youth-related labour market intervention. Government efforts to change and expand the definition of ‘apprenticeship’ have come to blur the meaning of the phenomenon. Finally, the paper suggests the factors – economic and institutional-political – that potentially explain the similarities and differences of the two countries’ evolution.

7.5 What do we learn at work that is different from an educational institution?
Peliwe Lolwana, University of Witwatersrand

There is general agreement that TVET has to face ‘both ways’ – to higher education as well as to work. The learning for work is generally associated with Competence Based Education and Training (CBT). However, vocational education is highly differentiated from highly conceptual to highly contextual forms of knowledge firstly (Muller, 2008). Secondly, the coming together of the work-based and discipline based knowledge is not the same in all occupations. Thirdly, the meaning of ‘skills’ or what is learnt at work is not defined in the same way in different countries (Mulder, et. Al, 2007; Brockman et al, 2008; Clarke & Winch, 2006; Biemans, et al, 2004)). Advocates of Competency Based Training argue for the benefits of the system (Smith, 2010; Law, 2009) whilst the critics argue for its limiting effects (Wheelahan, 2007; Young, 2003). This paper builds on the arguments for and against competence based education by analyzing the kind of knowledge inherent in work-related learning and how the two kinds of learning come together in the various fields of vocational education and training. The paper contributes to the understandings of a further differentiation of curriculum and knowledge in vocational education and training, by examining the composition of work-related learning specifically.

How do various workplace learning experiences relate to the expectations of the organization, trainees and other stakeholders?
Michelle Mellick, UTS, Sydney

This paper examines how various workplace learning/teaching/assessing experiences relate to the expectations of the workplace, trainees and other stakeholders. The organisation (workplace) expects trainees to work, learn and interface with new technology, in an environment where changes to the nature of work require an increasing focus on soft skills, aesthetic skills and emotional intelligence. These changes in expectations pose challenges to the future pedagogy of Vocational Education (Unwin, 2009). How to identify expectations and what happens when those expectations are unmet is a vital key to understanding how the learning
organisation can support the expectations of both trainees and the workplace (Smith, et al 2011). The findings discussed in this paper are from a mixed mode study involving a survey instrument and 2 case studies. The survey instrument comprises a structured questionnaire for 50: trainees; teachers and workplace supervisors. The 2 case studies include: a medium sized security firm and a small (customer service team) from a large social networking organisation. Analysis of data, reveals a disconnect between trainee expectations and the organisation’s expectations. In other words the organisation’s expectations to maximise profits appears to be somewhat mismatched with trainee expectations that learning at work is aligned to their professional-development. It has been suggested that clarification of expectations by all parties may help to increase trainee satisfaction and reduce attrition rates, Sadler-Smith and Smith (2004) and Bowman, Stanwick and Blythe (2005). Further findings indicate when successful trainees share their workplace experiences/knowledge with colleagues they are simultaneously building networks that provide access to new yet connected resources. It may be beneficial to both the workplace and the learner/trainee to work in collaboration with ‘experts’ on workplace projects with a clear understanding of all expectations. This type of learning involves participation (Boud and Hager, 2012) where the learning is situated, and embedded in the daily routine of workplace practices (Lave and Wenger, 1991).

7.6 Cooperative Education in Higher Education
Norah McCrae, University of Victoria, British Columbia

This paper explores perspectives of those engaged in cooperative education in higher education (generally referred to as work-integrated education or WIE) on their experiences of workplace learning and the conditions and processes that are associated with learning in a workplace setting. Activity theory (Engstrom, 1987) provides the theoretical framework to examine these perspectives, conditions, and processes. The overarching purpose of the paper is to examine the types of learning that occur in the workplace and the conditions/processes that may facilitate or hinder learning in particular, the various human, structural, and organizational factors that enable transformative learning. Transformative learning (Mezirow, 2000) goes beyond content and processes of what is learned to enable the learner to find meaning in the experience, to critically examine their own thinking processes and assumptions, and potentially, to create a shift in their broader world-view. The perspectives and description of other factors will help to inform the development of a pedagogical model for WIE that enhances the learning derived from the experience.

Secondarily, the use of activity theory in the WIE context provides a new theoretical approach to enhance our understanding of learning in WIE that acknowledges the complex, inter-connected, and socio-cultural nature of the WIE system, which to date, has been lacking in the research literature.

Decision-making about HEIs among students of the 'mass' HE sector
Glynn Jones, University of Huddersfield

FE colleges have provided much recent expansion of English HE. Previous research suggests that those choosing colleges do so because of
barriers to participation at universities. The purpose of this research was to examine the students’ decisions to study a higher education course at an FE college rather than a university in order to understand whether, and how, they are constrained within their choices. A narrative enquiry approach was used and the interviews were examined within Bourdieu’s framework of habitus and field. The conclusions suggest that, while previous research concerning barriers to HE is still valid, the decisions reflected more complex strategic decisions based on individual perceptions of the benefits of spending time in higher education and the personal and financial costs. The students were shown to seek an HE qualification because of its value in the workplace, but they chose courses because of an instrumental rather than a vocational value. This work suggests it is important to reframe the question about participation in higher education. To ask why non-traditional students do not participate is to problematise their decisions and their value system, whereas, at least some of the problem remains with England’s narrow conceptualisation of higher education which limits choice for these student decision-makers.

11.00am – Coffee

11.15am-12.45pm – Plenary

Peter Pan’s shadow or the Emperor’s new clothes? Exploring the notion of career
Roger Harris
School of Education, University of South Australia, Adelaide
Linbury Room

‘Reality’, proclaimed Albert Einstein, ‘is merely an illusion, albeit a very persistent one’. What do we make of the notion of ‘career’? Is it a figment of our imagination? Is it ascribed to us? Is it a concept that becomes evident only in retrospect? Is it planned by us, or the result of circumstances? And how did we find ourselves in positions of VET administrators, teachers or researchers?

In an era of less predictability and security than in earlier days, the literature abounds with references to ‘career’. Insert the word into electronic databases like Google and 195 million items pop up, and into VOCED, 5,097! The daily media, too, is resplendent with articles on careers. Yet there is the claim that there is no common definition, resulting in conceptual confusion and lack of clarity.

In this presentation, I draw on academic literature, briefly on local newspapers and mainly on interviews from research studies I’ve been involved in over the past decade that have something to say about VET careers. Arguably, the phenomenon that most intrigues me is what I call the ‘just-in-case career’. Some examples will be presented, trending us perhaps more towards Peter’s shadow than the Emperor’s clothes!

Chair: Bill Bailey