Vocational Education & Training
Emerging Issues

VOICES FROM RESEARCH

V International Conference & Research Workshop
Stockholm, May 09-10, 2016



Research Group VETYL (Vocational Education & Training/Yrkeskunnande och Lärande), Department of Education, Stockholm University

Book of Abstracts

Edited by:
Lázaro Moreno Herrera, Viveca Lindberg & Marianne Teräs

PROGRAM Monday, May 09

12.00-13.00	Arriving at Sjöfartshotellet, Katarinavägen 26, Stockholm Registration
13.00 -13.15	Opening of the conference and practical information **Professor Lázaro Moreno Herrera & Associate Professor Viveca Lindberg**
13.15-13.35	Figshare as tool for scholarly communication – Use in the dissemination and citability. **Sofie Wennström,** Stockholm University Library/ Stockholm University Press
13.40-14.40 Sjöfartshotellet, Salongen	**Keynote 1**: **Professor Ines Langemeyer** Karlsruhe Institute of Technology, Germany Mindfulness in Cooperation – A Critical Refection on 'Transformative Agency' Chair/discussant: **Franz Kaiser**
14.40-15.00	Coffee break
15.00-16.00 Sjöfartshotellet, Biljarden **PARALLEL SESSIONS**	**Paper session 1: Content integrated language learning** Chair/Discussant: **Hæge Nore** **Nicole Kimmelmann**: Integrated content and language learning as a new challenge of vocational training – Experiences from new public funded qualification programs in the health care sector in Germany **Janne Kontio**: "You talk so posh English": Students of auto mechanics doing language ideology through teasing
Sjöfartshotellet, Salongen	**Paper session 2: Identity, creativity and narrative studies** Chair/Discussant: **Birgit Schaffar-Kronqvist** **Karen Evans & Chiara Biasin**: Exploring agency, learning and identity in women's' life trajectories in UK and Italy **Rocío P. Solís**: Theatre and education: Creative and innovative experience in VET **Ruhi Tyson**: Scaling narrative studies in building didactics: Reflections on three case studies
16.10-17:00 **17:00-17:10**	10-15 min walk to the Birka terminal. https://en.birka.se/ Check-in, boarding-cards and cabin keys Information about on-board programme and practicalities
17.10-18.10 Room: Stockholm	**Keynote 2:** **Associate Professor Marianne Teräs** University of Stockholm/Department of Education, Sweden Instrumentality and set of rules as conceptual resources to explain challenges in development work Chair/Discussant: **Viveca Lindberg**
18.20-19:50 Room: Skåne **PARALLEL SESSIONS**	**Paper session 3: Apprenticeship and learning environments** Chair/Discussant: **Per Andersson** **Susanne Kopatz & Michael Gessler**: Implementation of dual apprenticeship structures in German plants abroad: Boundary objects in educational transfer **Petri Nokelainen & Heta Rintala**: Investigating perceptions of learning environments and apprenticeship in the Finnish context **Evi Schmid**: Apprenticeship contract termination and dropout from VET in Norway and in Switzerland
Room: Carlshamn	**Paper session 4: National and regional perspectives on VET** Chair/Discussant: **Johanna Lasonen** **Juan Alberto Mena Lorenzo & Pedro Luís Yturria Montenegro:** An approach to the research nature of the current technical and vocational education Cuban **Margaret Malloch:** VET in Australia: Emerging issues and challenges for research

Room: Stockholm	**Ramlee B. Mustapha:** Green and sustainable development: Mapping the 21st century TVET in Asia-Pacific
	Paper session 5: Occupational identity, emotional capital and drop out Chair/Discussant: **Lázaro Moreno Herrera** **Michela Brockmann**: The role of occupational identity in apprenticeship in England and Germany – a learner perspective **Bénédicte Gendron**: Emotional capital: The set of emotional competencies as professional and vocational skills in emotional works and jobs **Rubén Comas-Forgas, Francesca Salvà-Mut & Jaume Sureda-Negre**: Drop-out and persistence itineraries amongst VET students: An empirical approach
19:50-20:00 **20.00**	Accommodation in cabins Dinner & social evening

Tuesday May 10

7.00-9.00 **09:00-09:10**	Breakfast Introduction to Day II
09.10-10.10 Room: Stockholm	**Keynote 3** **Dr Hamid Asghari** Karlstad University, Department of Educational Studies, Sweden From growing up to the teacher act: A life story study with eight vocational teachers in the industrial-technology programme Chair/Discussant: **Michael Gessler**
10:10-10:30	Coffee Break
10:30-12:00 Room: Skåne **PARALLEL SESSIONS**	**Paper session 6: Immigrants, competence and democracy** Chair/Discussant: **Marianne Teräs** **Johanna Lasonen**: Immigrants' competence and employment **Ali Osman, Maud Baumgarten & Katarina Sipos**: Learning in work life: A study of reception of newly arrived immigrants in the Swedish national fast track program **Franz Kaiser**: VET in democracy – Some questions towards vocational education between the poles of education for flexible ability to act in occupations and critical pedagogy in tradition of the critical theory of Bildung.
Room: Carlshamn	**Paper session 7**: **Transitions in VET** Chair/Discussant: **Margaret Malloch** **Laurent Veillard**: Complex transitions between different learning contexts: A case study from a French vocational school **Vibe Aarkrog**: Challenges in the transition between practice and theory in practice related teaching and learning **Christian Helms Jørgensen**: Transitions from VET to the labour market in the Nordic countries
Room: Stockholm	**Paper Session 8: Performance assessment, assignments and judgement** Chair/Discussant: **Fernando Marhuenda** **Hæge Nore**: Performance based assessment of skills and competencies at the end of VET – A contradiction to learning outcomes and standardized curricula? **Enni Paul**: Written assignments in Swedish vocational education **Birgit Schaffar-Kronqvist**: Judgement as a common challenge to vocational education – How to learn to differentiate between better and worse quality
12.00-13.30	Lunch & collecting luggage from cabins
13.30-15:00 Room: Skåne	**Paper session 9: Historical aspects and policy in VET** Chair/Discussant: **Christian Helms Jørgensen** **Camilla Gåfvels & Viveca Lindberg**: Drawing as a historically developed aspect of vocational knowing: Examples from Swedish VET

PARALLEL SESSIONS	**Åsa Broberg & Jonas Gustafsson**: 9Y – a short historical example on the issue of how to balance selection and integration in education **Guadalupe Francia**: Exploring the enactment of foreign language policies in Sweden: The case of vocational education programs in Sweden **Lázaro Moreno Herrera**: Polytechnic education – historical development, key principles and potential implications for VET
Room: Carlshamn	**Paper session 10: Vocational competence, dual VET and integration school and work** Chair/Discussant: **Vibe Aarkrog** **Per Andersson & Susanne Köpsén**: Maintaining vocational competence – A survey study among vocational teachers **Fernando Marhuenda**: The development of dual VET in Spain: ¿un brindis al sol? **Viveca Lindberg & Gun-Britt Wärvik**: Integration between school and work: Changes and challenges in two Swedish VET-programmes 1970-2015
Room: Stockholm	**Paper session 11: Knowledge in work-related settings** Chair/Discussant: **Karen Evans** **Larissa Freund & Michael Gessler**: Transplants in China: How do German firms solve the problem of skill formation at the shop-floor level? A case study. **Natasha Kersh**: Developing knowledge through different pathways in work-related settings in the UK context: Insights from the engineering sector **Petrous Gougoulakis, Hiroshi Numaguchi & Etsuo Yokoyama**: Workplace-based VET in Sweden and Japan: Contemporary challenges and prospects
15:00-15:20	Coffee break
15:20-15.50 Room: Stockholm **15.50-16:00**	**Panel discussion:** **THE NEW EUROPEANS: CHALLENGES FOR VET AND ADULT EDUCATION** Chair: **Gun-Britt Wärvik** Panel members: **Johanna Lasonen & Ali Osman**
	Conclusions
16:00	**Arrival in Stockholm**

Participants List

Name	Affiliation & country	Email
1. Ali Osman	Stockholm University, Sweden	ali.osman@edu.su.se
2. Åsa Broberg	Stockholm University, Sweden	asa.broberg@edu.su.se
3. Benedicte Gendron	University Paul-Valery, Montpellier 3 France	benedicte.gendron@univ-montp3.fr
4. Birgit Schaffar-Kronqvist	Åbo Akademi University, Finland	Bschaffa@abo.fi
5. Camilla Gåfvels	Stockholm University, Sweden	camilla.gafvels@edu.su.se
6. Christian Helms Jørgensen	Roskilde University, Denmark	cjhj@ruc.dk
7. Enni Paul	Stockholm University, Sweden	enni.paul@edu.su.se
8. Etsuo Yokoyama	Nagoya University, Japan	n47131a@nucc.cc.nagoya-u.ac.jp
9. Evi Schmid	Swiss Federal Institute for VET (SFIVET), Switzerland	Evi.Schmid@ehb-schweiz.ch
10. Fernando Marhuenda	University of València, Spain	fernando.marhuenda@uv.es
11. Franz Kaiser	University of Rostock, Germany	franz.kaiser@uni-rostock.de
12. Guadalupe Francia	Uppsala University, Sweden	guadalupe.francia@edu.uu.se
13. Gunn-Britt Wärvik	Göteborg University, Sweden	Gun-britt.warvik@ped.gu.se
14. Haege Nore	Oslo and Akershus University College of Applied Sciences, Norway	haege.nore@hioa.no
15. Hamid Asghari	Karlstad University, Sweden	hamid.asghari@kau.se
16. Hiroshi Numaguchi	Daitobunka University, Japan	hiro@ic.daito.ac.jp
17. Ines Langemeyer	Karlsruhe Institute of Technology, Germany	Ines.langemeyer@kit.edu
18. Janne Kontio	Uppsala University	janne.kontio@edu.uu.se
19. Johanna Lasonen	University of South Florida, USA/Jyvaskyla University, Finland	Johanna.lasonen@jyu.fi
20. Jonas Gustafsson	Stockholm University, Sweden	jonas.gustafsson@edu.su.se
21. Juan Alberto Mena Lorenzo	University of Pinar del Rio, Cuba	jamena@ucp.pr.rimed.cu
22. Karen Evans	University of London, UK	K.Evans@ioe.ac.uk
23. Larissa Freund	Bremen University, Germany	l.freund@uni-bremen.de
24. Laurent Veillard	Université de Lyon, France	laurent.veillard@ens-lyon.fr
25. Lázaro Moreno Herrera	Stockholm University, Sweden	lazaro.moreno@edu.su.se
26. Margaret E. Malloch	Victoria University, Australia	marg.malloch@vu.edu.au
27. Marianne Teräs	Stockholm University, Sweden	marianne.teras@edu.su.se
28. Maud Baumgarten	Stockholm University, Sweden	maud.baumgarten@edu.su.se
29. Michael Gessler	Bremen University, Germany	mgessler@uni-bremen.de
30. Michaela Brockmann	University of Southampton, England	M.Brockmann@soton.ac.uk
31. Natasha Kersh	University of London, UK	N.Kersh@ioe.ac.uk
32. Nicole Kimmelmann	University of Paderborn, Germany	nicole.kimmelmann@wiwi.upb.de
33. Pedro Yturria	University of Pinar del Rio, Cuba	yturria@ucp.pr.rimed.cu
34. Per Andersson	Linköping University, Sweden	Per.andersson@liu.se
35. Petri Nokelainen	Tampere University, Finland	petri.nokelainen@uta.fi
36. Petros Gougoulakis	Stockholm University, Sweden	petros.gougoulakis@edu.su.se
37. Ramlee Mustapha	University Pendidikan Sultan Iris, Malaysia	drramlee@yahoo.com
38. Rocío Peréz Solís	University of Las Palmas, Spain	rocio.perez@ulpgc.es
39. Rubén Comas-Forgas	University of Balearic Islands, Spain	rubencomas@uib.es
40. Ruhi Tyson	Stockholm University, Sweden	ruhi.tyson@edu.su.se
41. Susanne Kopatz	Bremen University, Germany	kopatz@uni-bremen.de
42. Vibe Aarkrog	Aarhus University, Denmark	viaa@edu.au.dk
43. Viveca Lindberg	Stockholm University, Sweden	viveca.lindberg@edu.su.se

ABSTRACTS

Keynote 1: Mindfulness in Cooperation – A Critical Refection on 'Transformative Agency'

Prof. Dr. Ines Langemeyer
Professur für Lehr-Lernforschung
Institut für Berufspädagogik und Allgemeine Pädagogik/House of Competence
Fritz-Erler-Str. 23 (Röser-Haus)
76133 Karlsruhe
ines.langemeyer@kit.edu

Abstract: Forms of "knowing-how" especially – mindful knowing – do not depend on intelligence or knowledge only. An important insight of organizational research from a system theoretical perspective is that mindfulness at work is created by particular cooperative activities which constantly re-ensure intersubjectivity in communication and awareness for the situation as a whole (cf. Weick/Sutcliffe, Managing the unexpected, 2001). Insights of psychological research show that teams organizing high reliability or high quality in some area need to mutually coordinate their perception and their collaborative experience to generate adequate behavior and intervention (Langemeyer, The knowing of mindfulness, 2015). This includes not only the maintenance of concentration and awareness, but also *scientific* engagement with the processes to control (Langemeyer, Learning in a simulation-OT in heart surgery and the challenges of the scientification of work, 2014). Shifting the focus away from knowledge to knowing, away from the general capacities of the mind to the concrete *human activity* that integrates mental, communicative and practical behavior implies that we need to investigate the psychodynamics within concrete forms of agency. In particular, this paper scrutinizes theoretical notions of collective transformative agency in terms of a quality that goes beyond individual capacities. The main thesis is that both qualities of practice, mindful knowing and transformative agency, can be understood by the *scientification of work activities* rather than by referring to a system theoretical model of work activities as, for example, Engeström et al. suggest. The theory of the scientification of work activities attempts to *explain* the development of greater awareness with regard to complexity and unclear problems (such as risks, unintended reciprocal effects, or contingent developments) as well as to cooperative forms of agency, but it refuses to ascribe these capacities completely to properties of a system. A systemic perspective is not rejected, but the argument is mainly corroborated by psychodynamic concepts from the work of Vygotsky, Lewin and Kuhl.

Keywords: Cooperative Competence, Mindfulness, Scientification of Work

Bibliographical notes:
Ines Langemeyer is Professor for the research on teaching and instruction at the Institute of Vocational Education and Training and the Philosophy of Education, Karlsruhe Institute of Technology, Germany.

PAPER SESSION 1: CONTENT INTEGRATED LANGUAGE LEARNING

Integrated content and language learning as a new challenge of vocational training - Experiences from new public funded qualification programs in the health care sector in Germany

Nicole Kimmelmann*
University of Paderborn
Department of Business and Human Resource Education
Warburger Straße 100, 33098 Paderborn, Germany
E-mail: Nicole.Kimmelmann@upb.de

Abstract: The growing need of professionals led to an increased transnational mobility in the health care sector within Europe. Integrating those foreign professionals into the job market implies an adjustment of adult vocational training for requalification or adaptation. Being faced with the connected challenge culturally and linguistically diverse groups within those qualification programs the presented project "Integrated content and language learning in professional adaptation qualification – a job-related training for specialist trainers in the health care sector" customizes a specific program to equip the trainers with methods to integrate the acquisition of knowledge and of learning-related language skills at the same time.

The focus of the proposed presentation describes the results of the first step of the project, a multi-perspective needs assessment, which consisted of a systematic document analysis and problem-centered qualitative interviews with experts, program coordinators and trainers. Data was collected and analyzed with respect to :

- Structure, trainers and participants in the qualification programs
- Role of language and culture in the qualification programs/workplaces
- Applied strategies to deal with the (linguistic) needs of participants
- Challenges for the trainers
- Necessary/requested contents of the advanced training

An overview of these results will be given together with implications for the planned training.

Keywords: Migrant learners in VET, professionalism of vocational trainers; integrated language and content learning; cultural and linguistic diversity; health care sector

Bibliographical notes:
Prof. Dr. Nicole Kimmelmann, has received a professorship for Business and Human Resource Education at the University of Paderborn, Germany, in January 2016. Her main areas of research: Diversity Management/Inclusion in Education, Integrated Content and Language Learning, Vocational Competence Assessment and Development, New Media in Learning and Teaching.

"You talk so posh English" : Students of Auto Mechanics Doing Language Ideology Through Teasing

Janne Kontio
Uppsala University
Department of Education
Box 2136, 752 37, Uppsala, Sweden, E-mail: janne.kontio@edu.uu.se

Abstract: This study draws attention to how students of auto mechanics in an upper secondary school in Sweden orient to language use through teasing in everyday interactions. Data are drawn from video-ethnographic work during two years in a beginner's level workshop within a Vehicle engineering program taught in and through a foreign language.

The study focuses on the ways in which a certain community of practice emerges through social interaction, in situated practices. The study here explores in detail the ways in which the participants engage in teasing activities related to language proficiency in order to capture ways of building a local community of practice; in this study with emphasis on lexical choices, language alternation, insults and different uptakes by co-participants in workshop interaction. Attention is focused on how and in what ways normative expectations on language use in the classroom studied can be seen to play a role in building an English speaking community of Swedish auto mechanics students in a classroom and work shop context.

A particular focus is on language choice and on the ways, in which participants can be seen to deploy teasing and insults as ways of co-constructing shifts between different second language registers, linked to deviant classroom language ideologies. A linguistic ethnographic and ethnomethodological approach is taken in order to explore how different language ideologies are oriented to in everyday student-peer interactions within auto mechanic school practices. Prior research shows clear interplay between students' teasing and power relations and how the ability to tease and joke is an important resource and strategy to gain status and avoid submission (see Evaldsson, 2005; Kotthoff, 2006). It is here displayed how students' teasing related to conventionalized understandings of what it means to be an auto mechanic student in this environment is both strongly linked to, and both contests and reproduces normative expectations on language use as well as on professional behaviour. It is here argued that engaging in teasing, insulting and other joking activities should be seen as conditional for participation at the English medium instruction Vehicle programme and that it makes possible (re-) constructing and (re-) negotiating normative expectations on learning to use English as a second language in culturally appropriate ways.

Keywords: Auto Mechanics, Teasing, Disciplinary Humour, Vocational Education, community of Practice

Bibliographical notes:
Janne Kontio is a doctoral student at the Department of Education, Uppsala University, Sweden. He conducts empirical research in the field of education, with a special interest in the research areas of multilingualism, gender and embodiment as situated interactional

practices. The working title of his PhD project is "English and Mechanics – Language Use and Identity Work in a Vocational Education Setting" and it focuses on Swedish students enrolled in the Vehicle engineering program who are being taught in and through a foreign language (English).

PAPER SESSION 2: IDENITITY, CREATIVITY AND NARRATIVE STUDIES

Exploring Agency, Learning and Identity in Women's Life Trajectories in UK and Italy

Karen Evans*
UCL Institute of Education, University of London
20 Bedford Way, LONDON WC1H 0AL, UK, karen.evans@ucl.ac.uk
Chiara Biasin
University of Padova,
Department of Philosophy, Sociology, Education and Applied Psychology (FISPPA)
via Beato Pellegrino, 28 - 35137 Padova - Italy
chiara.biasin@unipd.it
* Corresponding author

Abstract: The exercise of agency is understood as a bounded process that is exercised through environments, drawing on Evans (2002; 2007; 2016) and Biesta et al. (2011). Furthermore, the biographical learning perspectives of Alheit and Dausien (2002) reveal aspects of the narrative-in-action which permit the research participants to negotiate and to make claims about different life events and about life course. Life experiences and women's representations of them also reflect cultural norms and expectations about the adult life course, particularly with respect to roles and relationships. Initial analysis of narratives and drawings (sketches) of 17 women born in 1958, selected from the 220 in-depth qualitative interviews conducted as a sub-study of the UK National Cohort Studies (NCDS), is extended to the analysis of comparable transcripts and drawings provided by a sample of women of the same age in Italy. This is part of a UK-Italian collaboration hosted by the ESRC Learning and Life Chances in Knowledge Economies and Societies.

Keywords: agency, life-course, adult learning, narratives, identities.

Bibliographical notes:
Professor Karen Evans is Professor in UCL Institute of Education and in the Economic and Social Research Council for Learning and Life Chances in Knowledge Economies and Societies. Her research interests focus on learning in life and work transitions throughout the lifecourse.

Professor Chiara Biasin is Associate Professor in FISPAA, University of Padova. Her research interests focus on models of adult learning and transformative learning through the life course.

Theatre and Education - Creative and Innovative Experience in Vocational Education & Training.

Rocío P. Solís
University of Las Palmas of Gran Canaria
Department of Education
c/ Juana de Arco 1, 35001 Las Palmas de Gran Canaria, Spain
rocio.perez@ulpgc.es

Abstract: This paper considers that Theater in Education (TIE) has a constantly evolving definition, as new strategies and objectives for using theatre as an educational tool emerge. Most define TIE as a general term that includes all the interactive theatre practices that help aid the educational process. Some of these processes include developing original scripts, using the performance of a play as a springboard for interacting with an audience and discussing important topics or themes, or theatre activities used to support classroom curriculum. In Spain, 'applied theater' is still a little known term. Although no literature in Spanish on 'applied theater' (TA), if done in a while various theater projects with other names that fit perfectly within this, one of this was an experience developed in VET Center Villa de Agüimes, in the Canary Islands, where the theater was used as a creative and educational project within the Superior Training Cycles Preschool Education. All the teaching staff together with students participated in a play which performing within the municipal theater program of the City of Agüimes whose viewers are students aged 3 to 5 years. This experience is developed from a theater workshop taught by an artist for students cycle.

Keywords: Theater in education, applied theatre, creativity, innovative experience, artist-as-trainer.

Bibliographical notes:
Dr Rocío P. Solís is an associate professor at the Department of Education at the University of Las Palmas of Gran Canary, Spain. Her research interests focus on education and theater, communication skills, creativity in the teaching-learning process and also gender studies. She is advisory board member of the theatre office.

Scaling Narrative Studies In Bildung Didactics: Reflections on three case studies

Ruhi Tyson
Stockholm University,
Department of education
E-mail: **ruhi.tyson@edu.su.se**

Abstract: In research on education the field roughly covered by the concept of Bildung has seen a wide-ranging discussion philosophically but less has been said and done from an empirical and teacher-vocational perspective (Rittelmeyer 2012, Tyson 2015a, 2015b). Bildung includes matters such as: formation of character, ethical and aesthetic knowledge/capability, capacity for wise deliberation and reflection as well as the development of personal autonomy (Rittelmeyer 2012) and is defined here in close connection with the Aristotelian phronesis or practical wisdom (Tyson 2015b) in the sense that to afford Bildung in education, from a practical standpoint, is about a teacher's phronesis. The theoretical framework for this is phronetic social science as articulated by Flyvbjerg (2001) and Schram (2012).

The aim is to present a brief outline of narratively articulated Bildung didactics, a field of research closely related to both Bildungsgangdidaktik (Gessler 1988, Meyer 2009, Trautmann 2004) and reflective practice (Schön 1983, 1987), and then to discuss the first impressions of three multiple-case studies where the form of the inquiry has been scaled to produce a larger number of narratives.

The empirical basis for this draws on four recent studies. One is the biography of craftmaster Wolfgang B. (Tyson 2015a, 2015b) and his paradigmatic narratives of Bildung didactics as experienced over the course of his vocational education. The three other studies have, in different ways, tried to scale the initial results from the biographical study by introducing more specific Bildung didactical question in various teacher education contexts as tasks for the teacher students. One is a study reported at ECER 2015 (Pedagogical imagination and practical wisdom: the role of good narratives in teacher education and professional development) concerned with narratives of successful conflict resolution among after-school care teachers. The second is a study with vocational teacher students and their stories of vocational Bildung experiences during their own vocational training. The third is a study with students at a nursing teacher program and their stories of existential Bildung didactical events in their experience and handling of patients' suffering and similar matters. Especially the latter two studies will be the focus of some reflection with the aim of clarifying some potentials, limitations and possibilities for VET teacher education in particular.

Keywords: Narrative; Didactics; Bildung; Phronesis

Bibliographical note:

Ruhi Tyson is PhD student at Stockholm University, Department of Education. The thesis focuses on how practical knowledge in the area of Bildung and phronesis can be narratively articulated and potentials of such an approach.

KEYNOTE 2

Instrumentality and rules as conceptual resources to explain challenges of development work

Marianne Teräs
University of Stockholm
Department of Education
Frescativägen 54, 10691 Stockholm, Sweden
E-mail: marianne.teras@edu.su.se

Abstract: This presentation explores organizational change efforts in two distinct organizations. The first case depicts a longstanding, multi-organizational development work within training of dentist and oral-hygienist students. The second case comes from a vocational college in which focus of development was a collective database for vocational teachers about intercultural issues. Theoretical anchoring of both cases was cultural-historical activity theory and expansive learning. Research material received involves individual interviews, videotaped treatment sessions and group discussions. In the analysis I will focus especially on two elements of the activity-system model: instruments or instrumentality (Engeström 2007) and rules. The concept of rules is under analyzed within activity-system model, with the help of Ostrom's (2007) notion rule constellation some light is shed to challenges of development work. Furthermore, I will explore how these concepts can explain some failures of development work within organizations. It seems that in organizational change efforts transformations are needed in many levels of instruments and that practitioners have a possibility to tinker rules.

Keywords: Instrumentality, rules, activity system

Bibliographical notes:
Dr Marianne Teräs is a Senior Lecturer at the Department of Education at the University of Stockholm, Sweden. She has two areas of research interests: VET and intercultural challenges of VET. Her latest research focused on experts' learning via simulations in health care.

PAPER SESSION 3: APPRENTICE SHIP AND LEARNING ENVIRONMENTS

Implementation of Dual Apprenticeship Structures in German Plants abroad: Boundary Objects in Educational Transfer

Susanne Kopatz*
University of Bremen
Institute Technology and Education (ITB)
Am Fallturm 1, 28359 Bremen, Germany
E-mail: kopatz@uni-bremen.de

Michael Gessler
University of Bremen
Institute Technology and Education (ITB)
Am Fallturm 1, 28359 Bremen, Germany
E-mail: mgessler@uni-bremen.de
* Corresponding author

Abstract: The presented paper intends to learn about companies' attempts to transfer educational concepts by means of a case study. The investigated cases are from the automotive industry and a comparative approach (Germany, USA, South Africa) is used here to focus on the implementation of dual apprenticeship structures. How do German plants abroad build up cooperations within very different cultural environments? The theoretical approach is, coming from Engeström's activity theory, the concept of boundary objects with regard to boundary crossing.

Keywords: Boundary Objects, Vocational Education and Training, Educational Transfer, Activity Theory

Bibliographical notes:
Susanne Kopatz is a research associate at the Institute Technology and Education (ITB) at the University of Bremen, Germany. She studied Economics at the University of Cologne. Her research interests focus on educational transfer and vocational education and training systems in different countries.

Dr Michael Gessler is a Professor at the Institute Technology and Education at the University of Bremen, Germany. His research interests focus on transfer and innovation research in vocational education and training, vocational didactics, work-based learning, professional development and school-to-work transition.

Investigating perceptions of learning environments and apprenticeship in the Finnish context

Petri Nokelainen*
Tampere University of Technology,
33720 Tampere, Finland
E-mail: petri.nokelainen@tut.fi

Heta Rintala
Tampere University of Technology,
33720 Tampere, Finland
E-mail: heta.rintala@tut.fi
*Corresponding author

Abstract: Vocational education and training is under reform in Finland and the Government programme (2015) aims at increasing work-based learning at the secondary level. The purpose of this study is to identify how workplaces understand their role as part of apprenticeship training and how apprentices perceive the form of study. The apprenticeship training in Finland combines learning in the workplace (70–80 %) and theoretical studies in an educational institution. The apprenticeship training period is based on a fixed-term employment contract, which outlines a wage according to collective agreement and the status of an employee. The contract must be approved by the education provider (apprenticeship office or educational institution) (Koukku & Kyrö, 2014). The study answers the following questions: 1) How do the work community (employers, workplace trainers and co-workers) experience their educational role and the role of an apprentice in the work community? 2) How do apprentices experience the apprenticeship training and their status within the work community? The qualitative, empirically based phenomenographic study aims to identify the different ways, in which people experience and understand phenomena (Marton, 1986). The perceptions emerge from the data and the objective of the phenomenography is to provide a set of categories of descriptions, which together compose the collective understandings of phenomenon (Åkerlind, 2012).

Keywords: apprentices, learning environments, work communities, Finland.

Bibliographical notes:
Dr. Petri Nokelainen is a Full Professor (Engineering pedagogy) in the Tampere University of Technology, Finland. His research interests include investigation of professional growth, (workplace learning and mentoring), development of professional and vocational excellence (self-regulation, competence, regulation of learning), learning environments, educational technology applications (pedagogical usability, pedagogical design and scripting, learning analytics), and applied multivariate and Bayesian methods (hybrid modeling, psychometrics).

MA Heta Rintala is a researcher in the Tampere University of Technology, Finland. Her research interests include institutional models of apprenticeship training, learning at work learning and development of expert communities.

Apprenticeship contract termination and dropout from VET in Norway and in Switzerland

Evi Schmid
Swiss Federal Institute for Vocational Education and Training SFIVET
Kirchlindachstrasse 79, 3052 Zollikofen
E-mail: evi.schmid@ehb-schweiz.ch

Abstract: Vocational education and training and thus the preparation of young people for the job market follows different patterns in Norway and in Switzerland: While Switzerland is characterized as a collective skill formation regime with a high level of public investment and strong firm involvement, Norway shows many indicators of a statist skill formation system (Busemeyer & Iversen, 2012). Norwegian youths have a statutory right to three years of upper secondary education – either a vocational or a general academic programme offered within the same schools – which almost all of them enter into directly after compulsory school. Around half of the youths enroll in a general academic programme while the other half enroll in a vocational programme (Utdanningsdirektoratet, 2015). The choice of a specific occupation and the transition into apprenticeship training and thus into working life takes place earlier in Switzerland, where around two thirds of the young people enrol in a VET programme (SERI, 2015). In spite of the many differences, Norway and Switzerland both struggle with occupational changes, apprenticeship contract terminations, and dropouts. In both countries, the reduction of the dropout rate is one of the top priorities in educational policy (EDK, 2015; Nyen & Hagen Tønder, 2014).

References:

EDK (2015). Übergang Obligatorische Schule – Sekundarstufe II. Programmatische Erklärung der Kantone, des Bundes, der Organisationen der Arbeitswelt, der Lehrerorganisationen: http://www.edk.ch/dyn/11665.php [24.2.2016].

Nyen, Torgeir & Hagen Tønder, Anna (2014). *Yrkesfagene under press.* Oslo: Universitetsforlaget.

SERI (2015). *Vocational and professional education and training in Switzerland. Facts and Figures 2015.* Bern: State Secretariat for Education, Research and Innovation.

Utdanningsdirektoratet (2015). *Utdanningsspeilet 2015. Tall og analyse av barnehager og grunnopplæringen i Norge*. Oslo: Utdanningsdirektoratet.

Keywords: Apprenticeship contract termination, dropout, occupational choice.

Bibliographical notes:
Dr. Evi Schmid is lecturer and senior researcher at Swiss Federal Institute for Vocational Education and Training (SFIVET). Her research interests focus on dropout from vocational education and training, professional education and training, vocational education and training in international comparison.

PAPER SESSION 4: NATIONAL AND REGIONAL PERSPECTIVES ON VET

An approach to the research nature of the current Technical and Vocational Education Cuban.

Juan Alberto Mena Lorenzo[*]
University of Pinar del Rio Hermanos Saiz Montes de Oca
Educational Studies Center for Education
Calle E 31-A
Reparto Jacinto, CP 20100. Pinar del Río, Cuba
E-mail: juan.mena@upr.edu.cu

MSc. Pedro Luís Yturria Montenegro
University of Pinar del Rio Hermanos Saiz Montes de Oca
Calle 484 # 703 CP 19120, Guanabo, Havana, Cuba
E-mail: pedro.yturria@upr.edu.cu

Abstract: Cuban Technical and Vocational Education is undergoing a profound transformation, which includes the change in focus of the training process in general. The current paradigm is based on shared school-company training. It has been necessary to use national and international experiences that in this field provide better results. Likewise, the new approach requires the best experiences of teachers and directors of education itself, applied in the new learning contexts. Achieving the required transformations requires the application of science, making permanent teachers researchers of their own processes. In this regard, the work aims at making an approach to the Cuban Technical and Vocational Education from its research approach, making a theoretical approach that part of a historical approach to the Cuban ETP, its characteristics and current challenges, key issues and theories which that the research process is based.

Keywords
Technical and Vocational Education; shared training, research approaches.

Bibliographical notes:
Dr. C. Juan Alberto Mena Lorenzo. Doctor in Pedagogical Sciences and Master in Professional Pedagogy. Professor – researcher of the Center of Pedagogical Studies for the Education of Pinar del Río, Cuba. His research interests focus for more than 30 years are in the field of vocational education and professional formation.

MSc. Pedro Luís Yturria Montenegro. Master in Professional Pedagogy, Head of the Department of Mechanical, Electrical and Building Education, of the University of Pinar del Río, Cuba. This professor researches for more than 30 years in the field of Vocational Education and in the development of the learning of Technical Drawing.

VET in Australia: emerging issues and challenges for research

Margaret Malloch,
Victoria University
College of Education
Footscray Campus
Ballarat Road
Footscray Park 3011
Australia
Email: marg.malloch@vu.edu.au

Abstract: This paper presents a review and critique of recent policy trends in VET in Australia, with a particular focus on the state of Victoria, which has led in the impletation of many of these. In Australia, there is a national policy level which sets general directions, overlaying specific state responsibilities and delivery of VET. The aims were for the creation of training model which was demand driven, and responsive to labour needs. A key policy is that of contestation, that is. competition between public and private training organisations for funding for students, which has impacted negatively on students, publically funded institutions and quality of programs and qualifications.
Another concern is that of the low level of VET teachers and trainers professional preparation. VET teachers and trainers operate in a highly casualised model of employment with little opportunity for professional development.

This marketised environment raises issues of quality, cost, completion, teaching and ethics and budget overspending. The challenge is to establish a vision for VET, a responsive and sustainable model promoting lifelong learning, improved roles for TAFEs and community sectors, transparency for students, industry and employers, support for quality and continuous improvement and promotion of equity for learners of all abilities.

Keywords: public vs private VET, marketisation, competition, access, quality

Bibliographical notes
Dr Margaret Malloch is the Director Research Training in the College of Education, Victoria University Australia. Her research interests include workplace learning, vocational education and training and doctoral education. She is Link Convenor of VETNET for ECER and on the Board of the International Journal for Research in Vocational Education and Training.

Green and Sustainable Development: Mapping the 21st Century TVET in Asia-Pacific

Professor Dr. Ramlee B. Mustapha, Ph.D
Department of Engineering Technology
Faculty of Technical and Vocational Education
Sultan Idris Education University
E-mail: drramlee@yahoo.com

Abstract: Green paradigm is emerging in Asia. In order to achieve sustainability, green development is critical. The growing significance of sustainability is having a major impact on business, industry, and society as a whole. Hence, preparing the future workforce for the coming green economy is a challenging task for many Asian countries especially in TVET sector in the post-2015 agenda. As a ground work, transforming TVET in Asia to meet the challenges of the green economy for the purpose of sustainability should begin now. The aim of this paper is to map the sustainable development in terms of green mindset, creativity, lifestyle, economy, education, training, employability and sustainability in selected Asian countries. A country's quantum leap or leap-frogging in sustainable economy is dependent of its transformation of human resources especially in TVET sector. Thus, TVET sector should be transformed to fit the requirements of the sustainable green paradigm. The results posit the country's policies, best practices, and challenges toward green economy in order to achieve sustainable development. Finally, the implication of green paradigm on TVET system in selected countries in the Asia Pacific will be discussed.

Key words: Green paradigm, sustainability, TVET, Asia

Bibliographical note:
Dr. Ramlee Mustapha is a Professor of Technical and Vocational Education at the Faculty of Technical and Vocational Education, Sultan Idris Education University (UPSI), 35900 Tanjong Malim, Perak, MALAYSIA.

PAPER SESSION 5: OCCUPATIONAL IDENTITY, EMOTIONAL CAPITAL AND DROP OUT

The role of occupational identity in apprenticeship in England and Germany – a learner perspective

Michaela Brockmann
Southampton Education School
University of Southampton
University Road
Southampton SO17 1BJ
Email: M.Brockmann@soton.ac.uk

Abstract: The formation of occupational identity is associated with the integration of young people into society and has been identified as one of the central outcomes of vocational education and training (VET), where it is seen as being closely linked with the development of competence (e.g. Klotz, 2014). Authors have commented on the

socialising role of occupations (e.g. Colley et al., 2003; Rauner, 2009), while others have raised questions about the link between certain provision and the concept of occupation (Fuller & Unwin, 2013). Yet, little is known about the processes of identity formation, and still less about the role of different VET traditions, types of provision and occupations.

This paper will present data from two recent studies of the learner identities of young people on engineering and motor mechanic apprenticeships in England and Germany. Drawing on Butler's (1990) work on performative identities, it will examine the unique construction in the two national contexts of 'the vocational' as a powerful social category and explore its role in young people's identity formation. The findings show that young people draw on a range of normative discursive categories and in ways that are meaningful in the contexts of their biographical experiences and multiple identifications.

Keywords: occupational identity; learner identity; VET; England; Germany

Bibliographical notes:
Dr Michaela Brockmann is a lecturer at Southampton Education School, University of Southampton. Her research interests include the sociology of education, vocational education and training, and young people's construction of (multiple) identities.

Emotional Capital: the Set of Emotional Competencies as Professional and Vocational Skills in Emotional Works and Jobs

Pr. Bénédicte Gendron
University of Montpellier 3
Department of Education
Route de Mende, 34000, Montpellier, France
E-mail: benedicte.gendron@univ-montp3.fr

Abstract: In the context of changes or decreasing quality of life at school and at work (violence, incivilities, stress, anxiety, depression, burn out, pressure, bullying..), research on Education with its dialectic links between learning and well-being competencies, that is, between educational processes and outcomes on the one hand, and well-being-promotion processes and outcomes on the other, suggests a frame to purpose radical alternatives and reconceptualize educational programms in itself. Beyond general knowledge (Savoirs) and technical skills (Savoir-Faire), the role of Emotional Capital, referring to the set of emotional competencies (Savoir-Etre), is crucial at sustaining human capital constitution in a broad sense and person development and well-being and performance (Gendron, 2004). This communication will be focus on the experimental research-action part of a global research led at the university of Montpellier 3 (IDEFI-UM3D), "Idefi-UM3D-emotional capital & well-being & performance", developing emotional competencies among emotional works and jobs, peticularly future educators and teachers' students, using tools from the positive psychology, the Mindfullness and the Acceptance and Commitment Training (ACT') and its return and impact on trainees' well-being, personal and social emotional competencies and performance. From an interdisciplinary approach combining sciences of education, economic of human resources and positive psychology, it shows that emotional capital, can improve the well-being and performance of trainees, future

educators and teachers which contributes to ensure sustainable and benevolence education and balanced person development and professional skills.

Keywords: emotional capital, emotional competencies, soft skills, ACT, mindfulness.

Bibliographical notes
Pr Bénédicte GENDRON, vice-president of the university of Montpellier 3, is a professor at the Department of Education at the University of Montpellier 3, France and is a member of Goleman International Center for Research on Emotional Intelligence in Organization consortium. Her research interests focus on emotional capital, the set of personal and social emotional competencies, vocational skills which are essential in all emotional works and jobs (management, education, health.. sectors).

Drop-out and persistence itineraries amongst VET students: an empirical approach

Rubén Comas-Forgas
University of Balearic Islands
Department of Applied Pedagogy and Psychology of Education
Campus UIB Building B. Pinós, 07122, Palma Mca., Spain
E-mail: rubencomas@uib.es

Francesca Salvà-Mut*
University of Balearic Islands
Department of Applied Pedagogy and Psychology of Education
Campus UIB Building G.C. Colonya, 07122, Palma Mca., Spain
E-mail: f.salva@uib.es

Jaume Sureda-Negre
University of Balearic Islands
Department of Applied Pedagogy and Psychology of Education
Campus UIB Building B. Pinós, 07122, Palma Mca., Spain
E-mail: sureda.negre@gmail.com
* Corresponding author

Abstract: In this paper we describe and summarize the rationale, objectives, methodology and the preliminary results of a research project carried out in the Balearic Islands and Barcelona (Spain) focused on analysing the drop-out and attainment itineraries followed by VET students of both regions. The project is funded by the Spanish Ministry of Economy and Competitiveness (with reference EDU2013-42854-R) and it is implemented by a consortium composed by researchers of the University of the Balearic Islands and the Autonomous University of Barcelona. The main objectives of the project are: (1) to generate new knowledge about vocational education and training dropout amongst students and (2) to develop positive action proposals and measures to prevent and reduce this dropout. To accomplish these general objectives a mixed methodological approach it is conducted including quantitative and qualitative methods. Project results will allow us to provide science-based evidence, strategies and tools that contribute to the improvement of existing knowledge about Spanish educational system of vocational training and, more

specifically, to prevent and to correct the serious dropout problem in these educational levels.

Keywords: VET dropout, academic engagement, VET academic persistence.

Bibliographical notes:
Dr. Rubén Comas-Forgas is an associate professor at the Faculty of Education at the University of Balearic Islands, Spain. His main areas of interest are: school dropout processes, pre-service teacher training, academic integrity and ethical competences amongst in-service and pre-service teachers.

Dr. Francesca Salvà-Mut is a lecture at the Faculty of Education at the University of Balearic Islands, Spain. She has been visiting researcher at several international centres, among which are: Université Laval (Quebec, Canada), Université du Québec à Montreal (Quebec, Canada), University of Toronto (Toronto, Canada). Her research interests are: school dropout, young people with low education profiles, gender work and education.

Dr. Jaume Sureda-Negre is Professor at the Faculty of Education at the University of Balearic Islands, Spain and Director of the Department of Applied Pedagogy and Psychology of Education. His main areas of interest are: school dropout processes, pre-service teacher training, academic integrity and environmental competences amongst in-service and pre-service teachers.

PAPER SESSION 6: IMMIGRANTS, COMPETENCE AND DEMOCRACY

Immigrants' Competence and Employment

Professor, Dr. Johanna Lasonen
University of Jyväskylä
Finnish Institute for Educational Research
P.O. Box 35 (Alvar Aallon katu 9, Ruusupuisto)
FI – 40 014 Universtiy of Jyväskylä
Finland
Email addres: Johanna.Lasonen@jyu.fi

Abstract: Immigrants' competence and skills are underutilized across the European Union (Schuster, Desiterio & Urso, 2013), including Finland (Lasonen & Teräs, 2014). Vertical mismatch of education levels and jobs particularly concern the third-country nationals. According to Chiswick & Miller (2008) educational mismatch explains almost two-third of the differences in human capital returns between majority (natives) and minority (immigrants). Identification and accreditation of prior learning and competence are concerns for immigrants as job-seekers, and teachers and employers as evaluators of immigrants' prior learning and competence. The research paper describes how immigrants define and experience recognition of their competence for employment in a new country. Having a job and income is a way off poverty for immigrants. A conceptual framework leans to a ciritical social theory of recognition. In-depth interviewing and questionnaire method were applied in data collection among immigrants who represented various occupational fields. The interviews were audio recorded, transcribed, and analyzed using a

thematic analysis method. A third of the informants have been long-term unemployed. Those who had jobs, most of them had short-term and part-time work, and therefore their incomes were much less than the natives had. The complex concept of competence recognition and some implications are discussed.

References:

Chiswick, B.R. & Miller, P. (2008). Why is the payoff to schooling smaller for immigrants? *Labour Economics*, *15*(6), 1317-1340

Lasonen, J. & Teräs, M. (2014) Challenges to recognizing foreign competence for employment in Finland: Avoiding immigrant economic stratification. In E.L. Brown, P.C. Gorsky and G. Lazaridis, *Poverty, Class, and Schooling: Global Perspectives on Economic Justice and Educational Equity* (pp. 101-125). Charlotte, NC: Information Age Publishing Inc.

Schuster, A., Desiderio, M.V. and Urso, G. (2013). *Recognition of qualifications and competences of migrants.* Brussels: International Organization for Migration, IOM.

Keywords: immigration, recognition of competence, prior learning, equity

Bibliographical notes: Dr. Johanna Lasonen is Professor in the Finnish Institute for Educational Research at the University of Jyväskylä, Finland, and in the Department of Leadership, Counseling, Adult, Career and Higher Education (LCACHE), College of Education, at the University of South Florida. Her research interests focus on immigrants' access to workforce, comparative vocational education, assessment of vocational graduate programs, and equity issues education and workforce.

Learning in work life: A study of reception of newly arrived immigrants in the Swedish National fast track program.

Ali Osman*
University of Stockholm
Department of Education
Frescativägen 54
106 91 Stockholm
Sweden
E-mail: Ali.osman@edu.su.se

Maud Baumgarten
University of Stockholm
Department of Education
Frescativägen 54
106 91 Stockholm
Sweden

Katarina Sipos
University of Stockholm
Department of Education
Frescativägen 54
106 91 Stockholm
Sweden

* Corresponding author: Ali Osman

Abstract: There is a general consensus that it takes at least five years of professional / skilled refugees / immigrants from outside the EU /ESS area to gain access to the Swedish labor market. To shorten the entry of newly arrived immigrants into the Swedish labor market, the government has introduced new programs called the fast track". In this study we are particularly interested to answer the following questions.

- How is the learning at work organized in workplaces?
- How organized learning in formal education?
- What skills are recognized in the workplace and in formal education?
- How is the theoretical and practical knowledge integrated in the program?
- What individual and organizational factors facilitate and hinder the implantation of the projects ambitions.

The analytical point of departure of this study departs from Ellström´s model of professional skills development. The study design is based on; participatory research and case study research. Methodological the study intends to use an interactive research approach. Our interested is to build a Nordic research consortium to build a research consortium in this area

Keywords: work place learning, inmigrant, practical and theorethical knowledge

Bibliographical notes:
Ali Osman is an associate professor at the Department of Education at the University of Stockholm, Sweden. His research interest focus recognition of prior-learning and transition from education to work life.

VET in Democracy – Some questions towards vocational education between the poles of education for flexible ability to act in occupations and critical pedagogy in tradition of the critical theory of Bildung

Franz Kaiser
University of Rostock
Faculty of Humanities
Instutute for Vocational Ecucation
August-Bebel-Str. 28; D 18055, Rostock, Germany
E-mail: franz.kaiser@uni-rostock.de

Abstract: The central task of *Bildung* in the tradition of Frankfurt School of critical theory is enabling people to create their life on their own including critical reflexion on society and to act with responsibility for nature and with solidarity for others. The historical situation after World War II and the Holocaust shaped this tradition that influenced the critical educational philosopher Heinz-Joachim Heydorn. His main publication was titled: "About the Contradiction between Bildung and domination" (1970) and he described in many articles the contradictions towards *Bildung* in a capitalistic society and in the early bourgeoise history.
In the 1970s some VET researchers had a discourse about the consequences of his ideas for VET. The contribution will revive this discourse and aims to initiate an international debate.
What about the tasks of *Bildung* in general?
Is the debate about sustainability in VET helpful?

Are unions a helpful stakeholder to strengthen a debate like this?
Is this only a German debate?
What does it imply for the curricula and VET research?

Keywords: Theory of VET, democracy, critical theory in Frankfurt.

Bibliographical notes:
Prof. Dr. Franz Kaiser is director of the Institute for Vocational education at the University of Rostock. His research interests focus on vocational education and identity, the development of training regulations, group oriented didactics and critical VET theory.

PAPER SESSION 7: TRANSITIONS IN VET

Complex transitions between different learning contexts: a case study from a French vocational school

Laurent Veillard
Université Lumière Lyon 2**,**
UMR ICAR (CNRS, Lyon 2, ENS de Lyon) / Labex ASLAN
ENS de Lyon, 15 Parvis Descartes, 69007 Lyon, France
E-mail: laurent.veillard@univ-lyon2.fr

Abstract: In France, VET upper secondary courses (Certificate of Vocational Ability (CAP); Vocational baccalaureate) are characterised by a large pedagogical diversity, both in terms of types of knowledge taught (general, technical and theoretical, practical skills and behavioural attitudes, etc.) and learning situations (traditional classroom courses, practical tasks in a school workshop, serious games or virtual simulation devices, workplace learning during some internships, etc.). At first glance, this pedagogical diversity can be considered as positive for students: more varied teaching situations would contribute to increase students' motivation; and enriched curricula help future workers to better face the complex evolutions of workplace situations. But, at the same time, this diversity and richness can also increase the complexity of the students' curriculum, especially if they have learning difficulties, as it is often the case in this part of the French educative system (Veillard, 2015). Indeed, students have to move frequently (daily or weekly) from one learning context to another. These frequent transitions (Beach, 1999) require a great capacity to adapt to different epistemologies and ways of learning. Strong transfer abilities are also required to link the various knowledge, skills and attitudes learned in different learning contexts and integrate them in order to develop complex competences for work (Tynjälä, 2009). Generally, students get little help from teachers to manage these complex transitions from one learning context to another. In our communication, we present the results of a comparative study between 3 different teaching lessons within the same vocational training course (CAP in automotive repairing): a lesson in French (as a first language); another in theoretical mechanics; and a practical workshop session. We used concepts like classification, frame (Bernstein, 1996), milieu, didactical contract (Brousseau, 1986, Sensevy, 2007) to analyse the pedagogical specificities of each learning context. Finally, from this comparative study, we can infer some of the characteristics of the complex transitions (Beach, 1999) required to take advantage of each learning context. The results show important discontinuities between each these 3 learning

contexts (ex: organisation of space and temporality of each lesson, etc.) but also some continuities, like the use of multimodal texts both during the French lesson and the practical workshop session.

Keywords: France, VET secondary courses, transitions between learning contexts.

Bibliographical note:
Laurent Veillard is Assistant Professor at Lumière Lyon 2 University. He is a member of ICAR Laboratory (icar.univ-lyon2.fr) and ASLAN Labex (aslan.universite-lyon.fr.) His research interests focus on vocational education, both at secondary and tertiary levels. He is more particularly interested in students' complex transitions between learning contexts (general and technical teachings in classrooms, practical sessions in school workshop, internships in companies, etc.) within vocational training courses.

Challenges in in the transition between practice and theory in practice related teaching and learning

Vibe Aarkrog
Danish School of Education
Aarhus University
Tuborgvej 164, 2400 Copenhagen N.V., Denmark
Viaa@edu.au.dk

Abstract: Based on research showing that the students' challenges in learning in practice based learning can be located to the transitions between theory and practice, in this study the focus is on how teachers support the students in these transitions. The theoretical framework includes Brousseau's 'Theory about didactical situations' and Basil Bernstein's concepts 'horizontal and vertical discourses'. The data includes observations combined with interviews of teachers in relation to various examples of practice related teaching in the social and health care programs. The results show that the teachers employ a number of different forms of practice related teaching, e.g. making role plays, giving examples, or exchanging experiences from practice. The teachers establish the transitions between learning theory and working with or in practice verbally, e.g. by showing the students the plan for today's class and returning to this plan at intervals or by telling the students what to do next, e.g.: "after this role play we will reflect on repetition of the theoretical knowledge that is relevant for the actions in the role play. The results indicate that the longer time the students spend working with practice the more time it takes to bring the students back to the theoretical parts. Likewise the more close to practice the practice based activities are, the more the teacher will have to explicate the relation to practice.

Key words: Holistic learning, practice-based learning, VET didactics.

Bibliographical note:
Vibe Aarkrog is an associate professor at Aarhus University and chief consultant at the Ministry for Children, Education and Gender Equality within within VET. Her research field is VET pedagogy and didactics with a focus on coherence and transfer between school-based and practice based learning.

Transitions from VET to the labour market in the Nordic countries

Christian Helms Jørgensen
Roskilde University**,**
Department of People & Technology,
DK-4000 Roskilde, Denmark
E-mail: cjhj@ruc.dk

Abstract: In the Nordic Countries, the two dominant types of VET-systems are represented: full time school-based (Sweden and Finland) and apprenticeship based systems (Denmark) and Norway as a mixed model. The paper examines the implications of these different systems for the linkages of VET to the labour market. A key issue examined is the pattern of transition of the students to the labour market after completion of VET. Another issue explored is the involvement of the labour market organisations in the governance of VET at different levels. In addition, the paper examines the standardisation and certification of vocational qualifications in the labour market and the portability of the skills acquired through the VET system. All the Nordic countries have attempted to introduce or expand apprenticeship programmes in the latest decades in order to improve the connection of VET to the labour market. Some lessons from these attempts are considered. In addition, the paper examines the question of social equality in the access to work-based training, and the different forms of cooperation between vocational schools and training companies.

Keywords: Nordic Countries, VET-systems, employment, transitions.

Bibliographical note:
Christian Helms Jørgensen is professor at the Department of People & Technology at Roskilde Universitet, Denmark. His research interests focus on vocational education in a comparative perspective, school to work transitions, drop-out and inclusion in education, social and gender inequalities in education and learning in working life.

PAPER SESSION 8: Performance assessment, assignments and judgement

Performance based assessment of skills and competencies at the end of VET – a contradiction to learning outcomes and standardized curricula?

Hæge Nore
Oslo and Akershus University College of Applied Sciences
Faculty of Education and International Studies
Department of Vocational Teacher Education
PO box 4 St. Olavs plass, NO-0130 Oslo, Norway
Email: haege.nore@hioa.no

Abstract: The paper presents and discusses assessment practices of Norwegian trade examination boards as they execute the final quality control in VET. Practices as shown through two research studies (Deichmann-Sørensen et al , 2011; Nore & Lahn, 2015) supplemented by observations in training sessions for board members in 2015 and 2016. Results show different interpretation of and emphasis on learning outcomes as described in

the curricula. On the other hand, authentic performance and authentic assessment are emphasised (Gulikers et al, 2008) as most of the trade examinations are conducted as through daily work at work-places. Assessment criteria are developed locally by a community of board members and sometimes approved by regional authorities. The tight links between authentic performance and company-specific competency and quality requirements, challenges the boards' quality control of learning outcomes according to curricula. What is observed in all our studies, is different understandings of vocational competencies varying from holistic approaches to defining core elements (units) of vocational competencies in a trade, and as such a wide range of assessment practices. Standards in performance-based assessment is still an ongoing discussion (Brockmann, Clark & Winch, 2008).

Keywords: assessment, learning outcomes, trade examination boards, authenticity

Bibliographical notes:
Hæge Nore is an Associate Professor at the Department of Vocational Teacher Education at the Oslo and Akershus University College of Applied Sciences, Norway. Her research interests include vocational education and training, workplace learning, hybrid learning, assessment in VET and the training of trainers

Written assignments in Swedish vocational education

Enni Paul
Stockholm University
Department of Education
Frescativägen 54, 106 91, Stockholm, Sweden
E-mail: enni.paul@edu.su.se

Abstract: This paper will focus on what and how vocational knowing is afforded in school assignments given to students in relation to the workplace-based learning part of the Swedish upper secondary school's Health and Social Care-programme.
Previous studies have pointed at a gap between the reading and writing afforded in vocational education, and the literacy practices at workplaces (Berglund 2009, Göransson 2004, Nikolaidou 2011). This kind of gap can create hindrances for vocational students participation in work tasks. But the literacies at school can also function in a broadening sense, affording new alternative perspectives (Lindberg 2003).
The empirical data consists of a collection of school assignments: logbooks and reports, from two different Health and Social Care-Programmes, as well as qualitative interviews with teachers and students. The school assignments have been analysed with the help of concepts developed within the Systemic Functional Linguistics (Halliday 2004, Karlsson & Holmberg 2006).
The preliminary results indicate that the logbooks have multiple and unclear functions: social, controlling, assessing and didactic. The literacy practices of writing logbooks have little connection to the writing practices of the workplaces. The written reports on the other hand are connected to types of writing that exists at the workplace, and the function of the assignment of writing a report seems more clear.

Keywords: literacy practices, vocational knowing, upper secondary school, systemic functional lingustics.

Bibliographical notes:
Enni Paul is a PhD student at the Department of Education at Stockholm University, Sweden. Her research interests focus on literacy practices in vocational education.

Judgement as a common challenge to vocational education - How to learn to differentiate between better and worse quality?

Birgit Schaffar-Kronqvist
Åbo Akademi University
Faculty of Education and Welfare Studies
Strandgatan 2, 65100 Vasa, Finland
E-mail: bschaffa@abo.fi

Abstract: Students in vocational education learn to produce different kinds of services and products. The aim in manufacturing things or delivering services is not only to realise the production in any way, but to strive for good quality in the work that is done. A student might have fulfilled the demanded task and cut hair, serve salad or clean a car in a certain way, but the important question remaining is whether or not this is done in a good way, with a result of good quality.

A central challenge in vocational education therefore is the question how to teach and how to learn to differentiate between better and worse quality?
After a general introduction, this paper will theoretically combine insights and teaching methods from both sloyd education, formative assessments and philosophy for children.
The aim is to scetch a theoretical background that helps to develop the methods for a) student's perception of differences in working-processes and results, b) an active vocabulary and c) the ability to express and receive critique.

Keywords: Quality judgement, formativ assessment, sloyd education, philosophy for children

Bibliographical notes:
Dr Birgit Schaffar-Kronqvist is a university teacher at the Faculty of Education and Welfare Studies at Åbo Akademi University in Finland. In her research she is interested in philosophy of education with focus on vocational education and vocational teacher training.

PAPER SESSION 9: Historical aspects and policy in VET

Drawing as a historically developed aspect of vocational knowing: examples from Swedish VET

Camilla Gåfvels*
Stockholm University
Department of Education
106 91, Stockholm, Sweden
E-mail: camilla.gafvels@edu.su.se

Viveca Lindberg*
Karlstad University
Department of Educational Studies
651 88, Karlstad, Sweden
E-mail: viveca.lindberg@kau.se

* Corresponding author

Abstract: A common conception about vocational knowing is that it is practical, which implies that manual work done by skilled hands dominate. Early attempts to systematize vocational knowing were done already in the 16th century by Vannoccio Biringuccio (Long, 2010) and by e.g. Denis Diderot in 18th century, who made drawings of tools, material, working techniques, and main products used within various vocations and complemented the drawings by terminology and written instructions (Pannabecker, 1994, 1996). According to Stratmann (1994), these kinds drawings, complemented by written instructions, contributed to a substantial change in vocational education and training.When the guild system was disbanded in Sweden in 1846, work-based learning became dominating. However, already since the 1820s, WBL was considered necessary to complement by schooling. Evening schools and Sunday schools were established. According to Larsson (2001), dominating subjects in these schools were different types of drawing – e.g. free-hand drawing, technical drawing, construction drawing and vocation specific drawing – as well as Swedish (reading and writing) and mathematics. However, most of the vocations related to have been predominantly male. The issue of this paper is to illuminate vocational drawing in two female vocations, seamtresses and florists in Swedish vocational education. Preliminary findings are used to illumniate changes in vocational knowing related to drawing over time.

Keywords: vocational knowing, vocational drawing, female vocations

Bibliographical notes:
Camilla Gåfvels is a PhD-student at the Department of Education at Stockholm University, Sweden. Her research centers on video-recorded classroom interaction, with a special interest in vocational knowing and teaching. The primarily focus in her research is how objects and situated resources influence interaction and communication, in teaching and learning.

Dr Viveca Lindberg is associate professor and visiting researcher at the Department of Educational Studies at Karlstad University, Sweden. Her research interests focus on

vocational knowing and how it emerges in assignments at school and work, and in the assessment of vocational knowing. Further interest is in curriculum theory and cultural historical activity theory.

9Y – a short historical example on the issue of how to balance selection and integration in education.

Åsa Broberg & Jonas Gustafsson
Stockholm University**,**
Department of Education,
Stockholm, Sweden
E-mail: asa.broberg@edu.su.se
jonas.gustafsson@edu.su.se

Abstract: 9Y was an educational option within compulsory school that offered a vocational training during a trial phase from 1952 to 1962, when a new compulsory school was established. 9y was an attempt to resolve a paradox embedded in educational reforms after World War II and sometimes labeled differentiation. At the heart of the issue of differentiation is the matter of both providing paths to higher education and to professional practice. While it is an offer, it is also a matter of selection. A national education system sorts students in various ways. The sorting is done through conscious political control and mechanisms that are not always fully visible. This article highlights a time and a debate though examining the phenomenon 9Y. The aim of the article is to highlight the issue of differentiation by analyzing both the debate and the practical, organizational expressions gained in the trial phase during the 1950s. The result will contribute to the understanding of historical and cultural context as conditions for how the process of sorting school students, with respect to being able to discuss the consequences for vocational training
Keywords: policy studies, differentiation, history of VET

Bibliographical notes:
Åsa Broberg is a lecturer at the Department of education, Stockholm university. Her research focus pedagogical development in vocational education and training from a historical perspective.
Jonas Gustafsson is a lecturer at the Department of Education, Stockholm university. His research focus history of education, sociology of education and music education.

Exploring the enactment of foreign language policies in Sweden: The case of vocational education programs in Sweden

Guadalupe Francia
Associate professor
Department of Education
Uppsala University
Box 2136
SE- 750 02 Uppsala, Sweden
guadalupe.francia@edu.uu.se

Abstract: Ever since the 1990´s different EU policies underline the need to develop the foreign language skills of EU-citizens. The skills are regarded as necessary both from an economic and a democratic point of view. Learning foreign languages are considered as an essential strategy to develop competitive knowledge-based economies as well as to be an important means to enhance tolerance and equity in Europe. Sweden carried out a policy reform in modern language education in 1994 in order to develop student´s modern foreign language proficiency. However, research studies from various directions indicate that the possibility to enact these policies on a school level is complex and challenging. It is also stressed that questions concerning modern foreign language policies are scarcely investigated in Sweden. Drawing on theory stemming from curriculum studies the political nature of policy this contribution discusses the enactment of EU-policies for foreign language proficiency with focus on vocational education programs at the Swedish school system. It focuses on frame factors that constrain such implementation and on enactment processes in local interpretation of policy. European and national education policy documents as well as national statistics are analysed.

Keywords: VET, foreign language proficiency, policy

Bibliographical note:
Guadalupe Francia is associate professor at the Department of Education at Uppsala University, Sweden. Her research interests focus on equity policies in different school contexts, education reforms, language proficiency policies and children's rights to education.

Polytechnic education – historical development, key principles and potential implications for vocational education and training

Lázaro Moreno Herrera
Department of Education
Stockholm University
SE 106 91 Stockholm
Sweden
E-mail: lazaro.moreno@edu.su.se

Abstract: Polytechnic education is grounded in the educational work of Nadiezka Krupskaia during the decade of the twenties in the twenty-century. The roots are, however, to be search for in the socio-economic writings of Karl Marx. Essentially in accordance the so-called polytechnics school was expected to be closely link to the socio-economic and more specific to the technological development of society. Enactment of a polytechnic education was to be based on a set of concept and key principles. These principles should not be confined to practical subjects but also influence the overall structure of the curriculum and cross-subject school activity.
With a historical perspective this paper presents conceptual grounds and analyses key principles of polytechnic education. The intention is to stimulate discussions of potential implications of polytechnic education for VET. More specific the paper intends to encourage discussion about the relationship between general/compulsory education and VET in times when we need to find answers to problems such as motivation and drop-outs in our vocational programs.

Keywords: Polytechnic education, vocational education and training, industry and school

Bibliographical note:
Lázaro Moreno Herrera is a professor of education with direction to vocational subjects at the Department Education at Stockholm University, Sweden. His research interests within the vocational education and training field are broad and include cultural historical activity theory, vocational education in a comparative perspective, didactics and different dimensions of policy issues.

PAPER SESSION 10: Vocational competence, dual VET and integration school and work

Maintaining vocational competence – a survey study among vocational teachers

Per Andersson*
Linköping University
Department of Behavioural Sciences and Learning
581 83 Linköping, Sweden
E-mail: per.andersson@liu.se

Susanne Köpsén
Linköping University
Department of Behavioural Sciences and Learning
581 83 Linköping, Sweden
E-mail: susanne.kopsen@liu.se
* Corresponding author

Abstract: Teachers' subject knowledge is crucial for the quality of education. Contemporary work life changes rapidly, which challenges vocational education and training (VET) and teachers who need up-to-date vocational competence. This paper concerns VET teachers' continuing professional development (CPD) related to vocational subjects.

The aim is to analyse teachers' participation in varying types of CPD activities.

- To what extent do VET teachers participate in CPD activities?
- How does participation vary between different vocational areas?
- To what extent can different factors explain participation in CPD activities?

The study draws on a socio-cultural perspective on practice, identity, and learning. Furthermore, the analysis is related to theory concerning adults' participation in education, which show how different factors influence participation in CPD. A survey was distributed to 2,000 Swedish VET teachers.The analyses are based on data on participation in different activities, barriers to and momentum for participation in these activities, and perceived effects in terms of professional development.

Results show how patterns of participation are similar between vocational areas, but with some significant differences between the areas. The variation in vocational areas does not have that much influence on participation. There are other variables having higher influence, but what have influence varies between activities.

Keywords: Vocational teachers, continuing professional development, participation, vocational areas, variation.

Bibliographical notes:
Per Andersson is a professor of education at the Department of Behavioural Sciences and Learning at Linköping University, Sweden. His research interests focus on recognition of

prior learning, and professional development among teachers in vocational and adult education.

Susanne Köpsén is an associate professor of education at the Department of Behavioural Sciences and Learning at Linköping University, Sweden. Her research interests focus on teacher identity and the continuing professional development of vocational teachers.

The development of Dual VET in Spain: ¿un brindis al sol?

Fernando Marhuenda
University of Valencia
Department de Didàctica i Organització Escolar
Facultat de Filosofia i CC. de l'Educació
Av. Blasco Ibáñez, 30, 46010, Valencia, Spain
E-mail: marhuend@uv.es

Abstract:
This paper will introduce a brief overview of the empirical research we have conducted about the development of the so called Dual VET in Spain during the past three years. Our research is mainly quantitative: we used questionnaires to gather information from headteachers as well as from teachers responsible to implement Dual VET in almost all regions in Spain, covering most of the occupational areas in which it has been developed. Dual VET was first regulated in Spain by the end of 2012 with the aim to progressively replace the existing work experience module within formal VET. However, companies have hardly contributed to its development and the educational administrations that mandated it did not support its development, while forcing VET schools and teachers to introduce it. This has resulted in an example of how not to implement educational reforms. In the paper, we will show differences among regions, occupational sectors and types of VET schools, and we will provide some reflections upon the light of the literature produced along these years about the goodness of Dual VET.

Keywords: Dual VET, alternance training, educational reform.

Bibliographical notes:
Dr Fernando Marhuenda is Professor in Didactics and School Organization at the School of Philosophy and Education at the University of Valencia, Spain. His research interests focus on vocational education, workplace learning, transitions between education and work, and education and training in contexts of vulnerability. He is currently working on the development of Dual VET in Spain as well as in training processes in Work Integration Social Enterprises.

Integration between school and work: Changes and challenges in two Swedish VET-programmes 1970-2015

Viveca Lindberg*
Karlstad University
Department of Educational studies
651 88, Karlstad, Sweden
E-mail: viveca.lindberg@kau.se

Gun-Britt Wärvik*
University of Gothenburg
Department of Education and Special Education
405 30, Göteborg, Sweden
E-mail: gun-britt.warvik@ped.gu.se

* Corresponding author

Abstract: Since 2011, Swedish upper secondary vocational education training formally offers two pathways in each of the twelve programmes: School-based VET, (incl. 15 weeks of work-based learning, *WBL*), and the "apprenticeship track" where 50% consists of WBL. Both pathways are regulated by the same curricula. National educational policy considers the two pathways equivalent in terms of merits although the content of experiences may vary. Importantly, the richness of learning experiences in the two sites and how these are integrated rely on negotiations between each school and their partners, such as enterprises and public organisations. In principle, local trade associations are also expected to be involved in the development of local curricula. However, Lemar & Olofsson (2010) found that local variation is huge in terms of the content for students' experiences.

National evaluations have made visible some problems with WBL. Some of these are related to the size of an enterprise and motives for accepting apprentices. Vocational knowing made available for students during their periods of WBL has been described as either a restricted or an expansive curriculum (Fuller & Unwin, 2003).

In this paper we will use cultural historical activity theory (CHAT) to analyse aspects that contribute to vocational knowing made available to students in relation to historically developed traditions of two VET programmes. In line with this theoretical perspective, we will firstly trace contemporary history regarding the division of labour between school and work, including contributions of schools and enterprises to the VET curriculum. Secondly, we analyse cases from Swedish empirical studies from each decade since the 1970s to discuss how the division of labour between school and work, and approaches to organising and supporting learning at each site, have evolved.

Keywords: integration of school and work, CHAT, vocational knowing

Bibliographical notes:
Dr Viveca Lindberg is associate professor and visiting researcher at the Department of Educational Studies at Karlstad University, Sweden. Her research interests focus on vocational knowing and how it emerges in assignments at school and work, and in the assessment of vocational knowing. Further interest is in curriculum theory and cultural historical activity theory.

Dr Gun-Britt Wärvik is associate professor and senior lecturer at the Department of Education and Special Education at the University of Gothenburg, Sweden. Her research interests focus on vocational education including professional knowing, and politics of education, and curriculum theory and cultural historical activity theory.

PAPER SESSION 11: Knowledge in work-related settings

Transplants in China: How do German Firms Solve the Problem of Skill Formation at the Shop-Floor Level? A Case Study

Larissa Freund*
University of Bremen
Institute Technology and Education (ITB)
Am Fallturm 1, 28359 Bremen, Germany
E-mail: l.freund@uni-bremen.de

Michael Gessler
University of Bremen
Institute Technology and Education (ITB)
Am Fallturm 1, 28359 Bremen, Germany
E-mail: mgessler@uni-bremen.de

* Corresponding author

Abstract: This paper aims to focus on the vocational education and training strategies and practice of German firms operating in China. The purpose is to investigate how German firms face the problem of skills formation at the shop-floor level in consideration of a different socio-cultural and political framing. On the basis of a qualitative case study of two selected German firms operating in China, methodologically conducted by expert interviews with human resources or training managers and CEOs, this paper aims to report about first empirical findings on German firms' strategies and practice of recruiting and binding (skilled) local workers as well as the conzeptualisation of personnel development and skill formation to fulfil the companies individual job requirements.

Keywords: China; Vocational Education and Training; Skill Formation; Local Labor Market, Skill Shortages

Bibliographical notes:
Larissa Freund, M.A., is a research associate at the Institute Technology and Education at the University of Bremen. Her research interests focus on international comparative research in vocational education and training, skill formation and work-based learning.

Dr Michael Gessler is a Professor at the Institute Technology and Education at the University of Bremen, Germany. His research interests focus on transfer and innovation research in vocational education and training, vocational didactics, work-based learning, professional development and school-to-work transition.

Developing knowledge through deferent pathways in work-related settings in the UK context: insights from the engineering sector.

Natasha Kersh
UCL Institute of Education
Department of Education, Practice and Society,
20 Bedford Way, London
WC1H 0AL, UK
n.kersh@ioe.ac.uk

Abstract: The paper aims to consider how engineers, learn and develop their knowledge through different pathways, and through the different learning spaces in which they are building on their knowledge. Specifically the paper considers issues of the development of underpinning knowledge that enables engineers to obtain Chartered status in the UK. The research has demonstrated that engineers develop their knowledge through different pathways that are often associated with different types of learning spaces: (1) academic pathway (such as postgraduate degree), and (2) experiential learning which relates to work-related and vocational learning routes (e.g. apprenticeship). The experiential learning route, which is considered to be a less- traditional pathway for obtaining chartered status, is strongly associated with aspects such as informal, self-directed learning as well as learning on the job. The paper will consider various elements of experiential learning, developed through work-related/vocational learning routes, and the extent to which such learning is as valuable as learning developed through accredited degrees. The paper will further discuss engineering knowledge development in the context of both pathways, and will further consider the role of the particular learning spaces associated with each route.

Keywords: experiential learning, engineering knowledge, learning pathways

Bibliographical notes:
Dr Natasha Kersh works at the Department of Education, Practice and Society, University College London. Her research interests include vocational education and workplace learning in the UK and international contexts as well as comparative education and lifelong learning. Natasha's teaching responsibilities involve BA, MA and Doctoral School teaching, including both lecturing and supervising MA/PhD/EdD students.

Workplace-based VET in Sweden and Japan. Contemporary Challenges and Prospects

Petros Gougoulakis*
Stockholm University
Department of Education
106 91 STOCKHOLM
E-mail: Petros.Gougoulakis@edu.su.se

Hiroshi Numaguchi
Daitobunka University
Deoartment of Literature
E-mail: hiro@ic.daito.ac.jp

Etsuo Yokoyama
Nagoya University
Graduate school of Human development and Education
4648601 Nagoya
E-mail: n47131a@nucc.cc.nagoya-u.ac.jp

* Corresponding author

Abstract: The purpose of this article is to present the Workplace-based learning that takes place within the frame of VET in Sweden and Japan today at the upper secondary and post-secondary education level. In addition to an overall portrayal of the internship and work place experiences related to VET a particular attention is paid on the relationship between school-based and work place-based training, on one side, and how the cooperation between educational suppliers and working life partners is shaped, on the other. In Sweden, all students in vocational programs at upper secondary school and in national programs at upper secondary special school have to conduct parts of their education in one or more workplaces outside of school. Workplace-based learning (APL), as it is called, can also occur in adult education and in non-vocational upper secondary programs.In Japan, almost 80% of the offered programmes at the upper secondary schools are general, and only 20% vocational, even those academic oriented. Practical training is not extensive and internship in the companies is of short duration (from one week to one month). The presentation ends up with some reflections on the future of VET in the two countries with tentative proposals for possible policy positions and actions.

Keywords: workplace-based education, VET in Japan, VET in Sweden.

Bibliographical notes:
Dr Petros Gougoulakis is an associate professor at the Department of Education at Stockholm University, Sweden. His research interests are in adult education, on educators' competencies, and VET (Vocational Education and Training), in relation to prevailing discourses of lifelong learning. He has extensive experience of international academic cooperation and during autumn semester 2014 was a Visiting Professor at the Graduate School of Education and Human Development at Nagoya University.

Dr Hiroshi Numaguchi is a professor at the Department of Literature at Daitobunka University, Japan. His research interests focus on the Relations between Japanese VET system in the company and Japanese school system, that is oriented towards General Education.

Dr Etsuo Yokoyama is a professor of Technology and Vocational Education at the Department of Educational Sciences, School of Education and Human Development, Nagoya University. His research interests focus on comparative study of VET system between Nordic countries (specially Sweden) and Japan.