

# COMPETENCE 2016

International conference on  
Competence theory, research and practice

OCTOBER 19 – 21, 2016

Wageningen University & Research

Conference Programme



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International conference on Competence theory, research and practice  
October 19-21, 2016  
Wageningen University & Research, The Netherlands  
[www.competence2016.nl](http://www.competence2016.nl)

Organized by the chair group of  
Education and Competence Studies  
[www.wur.eu/ecs](http://www.wur.eu/ecs)

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## About the conference theme

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The field of competence studies has grown exponentially. It has gained wide interest in all sectors of education, in various types of organizations, in research and in consultancy. Competence-based education, training and development, competence management and core-competence strategy have been blossoming since the 1960s.

What has theory, research and practical experience with implementing competence solutions brought us? What progress has been made so far, and to what extent have competence-based practices resulted in improved sustainable performance?

There has been a lot of criticisms on the competence concept. What have sceptics said; are their concerns valid, or are they outdated and based on the first conceptions and practices of the 1950s and 1960s, when competency-based training was introduced in military training? Is competence-based practice an empty shell in the sense that there is a big gap between competence-as-theory and competence-based-strategy? Are there sufficient operational guidelines to implement competence-based management, education and development practices, which do not follow command-logic as in defence organizations, but demand- and development-logic as in liberal education which emphasises autonomous, critical, and inclusive thinking and decision making.

In current educational and management sciences and practice competence-based strategies are common place. Actually we can say that competence-based education is a worldwide innovation. But are the claims of proponents of all competence modelling, assessment and development, which is going on right now, justified? Is there sufficient evidence of the efficacy of competence-approaches in management and education?

There is much talk about theories and definitions of competence, and there are many different perspectives. The earliest scientific contributions on competence-based education come from educational science. This resulted in proposals and practices of competence-based teacher education. Theories behind this on mastery learning and modularization were later heavily criticized. Can theories behind competence practice be combined and integrated? Some speak about exclusive epistemologies by which competence-based practices are being framed as a technical-instrumental; others contend that those practices are integral or holistic, and based on a variety of different knowledge theories.

Various alternative concepts have been brought to the fore to express what is needed to be successful in personal growth, education, employment and societal participation: capabilities, attributes, expertise, talents, excellence and more. The boundaries of these concepts are not clear. Some state that they are just positions on a proficiency scale which ranges from no, via mediocre to excellent competence. Indeed, professional competence can leave much to be desired, but can also exceed what can be expected. Was the rescue of Apollo XIII a matter of superior expertise, brilliant capability or extreme competence? The question is, does this word game really matter? Essential is that the crew of the mission returned to planet Earth safely. And that all involved were able to solve life threatening challenges.

In this melting-pot of contradicting interpretations, is there room for convergence and synthesis? Can different approaches, which seem opposite and unbridgeable, be reconciled? These, and more, questions will be raised during the international conference on competence theory, research and practice.

## About the conference theme

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The Scientific Organization Committee invited contributions on the following themes:

### Competence-based strategy and management

1. The (in)competent society;
2. Core competence of organizations;
3. Generic competency frameworks;
4. Competence and performance improvement;
5. Competence and sustainable development;
6. Competence assessment of trainees, employees and management;
7. Competence domains (entrepreneurship, leadership, innovation, transformation, etc.);
8. Competence and talent development (training, workplace learning, personal development, etc.);
9. Competence, expertise, capability and attributes;
10. Competence and the learning organization.

### Competence-based education

1. National and international education policy agendas;
2. Competence frameworks of teachers (in elementary, secondary and higher education);
3. Competence domains in higher education (services, health care, engineering, economy, etc.);
4. Competence-based vocational and professional education strategies;
5. Competence domains in elementary education;
6. Competence profiling and modelling;
7. Competence assessment and measurement;
8. Competence and knowledge development;
9. Competence-based curricula;
10. Competence-based learning and instruction.

### Competence Domains as goal

1. 21st century skills;
2. Problem solving competence;
3. Intuition as competence domain;
4. Mindfulness competence;
5. Transformational leadership competence;
6. Social competence;
7. Language competence;
8. Communicative competence;
9. Science and technology competence;
10. Competence for interdisciplinary teamwork.

Most of these themes are addressed in the conference papers. Based on the submissions, a programme is composed which includes papers on the following themes:

- Competence management and development, with presentations on management and leadership competence, training and development, team learning and performance improvement;
- Competence-based education systems, including competence in crisis, challenges in reform in VET systems, legislation and its effect, occupational science, and permeability of VET and HE;
- Competence assessment, such as for modeling and measurement of teachers' competence, and computer-based assessment of problem solving competence;
- Emerging developments in competence domains such as argumentation competence, 21<sup>st</sup> century skills, oral presentation, entrepreneurship and creativity;
- Boundary crossing competence and their learning environments, including the role of inter- and transdisciplinary research;
- and Sustainability competence and transition in school and work settings and in higher education.

## Scientific Organizing Committee

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- Frank Achtenhagen, University of Gottingen, Germany
- Kirby Barrick, University of Florida, USA
- Harm J.A. Biemans, Wageningen University & Research, The Netherlands
- Vincent Blok, Wageningen University & Research, The Netherlands
- Dine Brinkman, Wageningen University & Research, The Netherlands
- Ludger Deitmer, ITB, Bremen, Germany
- Agnes Dietzen, Bibb, Bonn, Germany
- Karen Fortuin, Wageningen University & Research, The Netherlands
- Michael Gessler, ITB, Bremen, Germany
- Stan van Ginkel, Wageningen University & Research, The Netherlands
- Samuel Greiff, University of Luxembourg, Luxembourg
- Judith Gulikers, Wageningen University & Research, The Netherlands
- Geoff Hayward, Faculty of Education, University of Cambridge, United Kingdom
- Frank de Jong, Stoas Videntum, Wageningen, The Netherlands
- Kees Kouwenaar, Vrije Universiteit Amsterdam, The Netherlands
- Thomas Lans, Wageningen University & Research, The Netherlands
- Sabine Manning, Wifo, Germany
- Martin Mulder, Wageningen University & Research, The Netherlands **(chair)**
- Petri Nokelainen, University of Tampere, Finland
- Omid Noroozi, Wageningen University & Research, The Netherlands
- Vitaliy Popov, University of San Diego, USA
- Piety Runhaar, Wageningen University & Research, The Netherlands
- Vidmantas Tütlys, Vytautas Magnus University, Lithuania
- Arjen Wals, Wageningen University & Research, The Netherlands
- Renate Wesselink, Wageningen University & Research, The Netherlands
- Jonathan Winterton, Curtin University, Sarawak, Malaysia

## Management-support team

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- Jolanda Hendriks-Ruisbroek, Wageningen University & Research, The Netherlands
- Nicolette Tauecchio, Wageningen University & Research, The Netherlands



## Practical information

### Conference venue

On Wednesday and Thursday the conference takes place in Forum. On Friday the conference takes place in Orion.

### Organization & crew

During the conference there will be several support-team members available to help and answer your questions. Please feel free to ask their assistance! Also, during every parallel session there will be a student available to assist. You will recognize the support-team members by their blue badges.

### Parking

Cars can be parked for free at the campus of Wageningen University & Research. Plan for a walk of 5 minutes from the parking to the conference venue, depending where you can park your car.

### Wifi

During the conference you can make use of free Wi-Fi at the campus. Follow these steps:

- 1) Text/SMS the keyword 'Wifi' to phone number: +31 6 51 28 71 29;
- 2) You will immediately receive a return text/SMS containing your personal Wifi username and password
- 3) Select the eduroam Wifi network on your device and enter your username and password.

### Lunch and breaks

On Wednesday and Thursday lunch is provided at the Grand Café in Forum. Coffee, tea and beverages are available during breaks in front of room C222. On Friday lunch is provided at the restaurant east-side in Orion. Coffee, tea and beverages are also available in this restaurant during breaks. Please make sure you wear your badge.

### Registering & information desk

Central registration takes place on Wednesday 19 October 09:00-10:30hrs in the Lobby of Forum. At the registration desk you will receive a conference bag and a badge. The registration desk as well as the information desk are open from Wednesday 09:00 until Friday 15:00hrs. They are located in the lobby of Forum on Wednesday and Thursday, and in the lobby of Orion on Friday.

### On site payment

On site-payment will be available at the registration desk during the following hours:

Wednesday: 09:00-10:30hrs and during lunch  
Thursday: 08:00-09:00hrs  
Friday: 08:00-09:00hrs

### Conference dinner

The conference dinner will take place at Hotel de Wageningen'sche Berg on Thursday October 20. You will receive a dinner voucher during registration (pre-registration required – additional fee applies). Please bring your dinner voucher with you. Afterwards, a free transit by bus to hotel Hof van Wageningen is available.

### Transit on Thursday

On Thursday October 20 free transit by bus is arranged from the conference venue to the Aula where the Farewell Address of Prof. dr. Martin Mulder will take place. The bus will leave the campus at 15:00hrs. The bus will not return to the campus afterwards, but will drive at 19:00hrs to the conference dinner and at 23:00 back to hotel Hof van Wageningen. Registration for this free transit is not required.

### Certificates

Certificates for attendance and/or presentation can be requested at the information desk.

## Conference locations

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The conference will take place at the Campus of Wageningen University & Research, mainly in Forum & Orion. Below are all conference locations listed.

### Conference Venue on Wednesday & Thursday



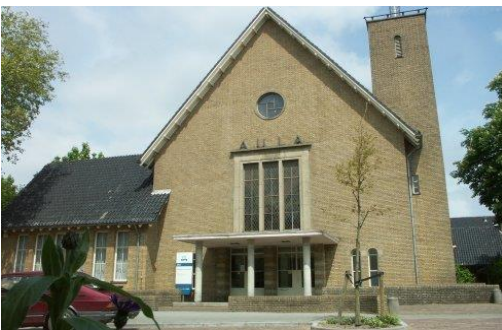
Forum, Building 102  
Droevendaalsesteeg 2  
6708 PB Wageningen

### Conference Venue on Friday



Orion, Building 103  
Bronland 1  
6708 WH Wageningen

### Farewell Address Prof. Dr. Martin Mulder & Reception on Thursday



Aula, Building 362  
General Foulkesweg 1a  
6703 BG Wageningen

### Conference Dinner on Thursday



Hotel de Wageningsche Berg  
Generaal Foulkesweg 96  
6703 DS Wageningen



## Keynote speakers | Mr. Eric de Boer

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Korn Ferry HayGroup, Amsterdam, The Netherlands  
Senior Consultant HR  
Wednesday, October 19, 13:15-14:15hrs

### **‘Competence development and performance improvement’**

In corporate strategy, management, training and development, much attention has been given to the concept of core competence, the development of competence frameworks, competence assessments, personal development plans, and learning opportunities during the last decades. The consultancy industry has strongly supported the implementation of competence development and performance improvement initiatives in organizations. A case study on this will be presented based on an interesting project conducted by Jumbo, which is a key player in the food retail sector in the Netherlands. Korn Ferry HayGroup, well-known for its long-standing history in competence research and development, as main consultancy organization for this project, will present the case.

## Keynote speakers | Prof. Dr. Reinhold Weiss

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Federal Institute for Vocational Education and Training (BIBB), Bonn, Germany,  
Deputy President and Head of the Research  
Thursday, October 20, 11:00-12:00hrs

### **‘Status of competence research in Germany: approaches – results’**

During the last decades research on competences and competence development has become a major research issue in Germany. Starting with international comparative studies on general competences like PISA a number of studies have been carried out. Research programmes such as ASCOT have transferred and developed new approaches to the field of vocational education and training. Scientific resources and methodological know-how have been developed. Measurement of competences meanwhile has become an integrated part of educational research. Nevertheless resources invested in VET-research are very limited. At the same time, approaches and results are the object of criticism. Two arguments are of central importance. Competence research has produced a lot of data but only poor results on reasons, instruments and advice on how to improve learning arrangements. Competence research has focused on testing competences on the basis of single items, but it has failed to measure holistic competences and the demands in the complexity of real work.

## Keynote speakers | Mr. João Santos

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European Commission Directorate General for Employment, Social Affairs and Inclusion, Acting Head of Unit C5, Vocational training and adult education  
Friday, October 21, 11.00-12.00hrs

### **‘The New Skills Agenda and the development of key competences’**

Europe's social market economy, combining economic and social development depends to a large extent on the skills and competences of its population. Skills drive innovation, competitiveness and employability. The European Commission is fully dedicated to addressing the challenges ahead in realizing lifelong learning and competence development. The New Skills Agenda, supporting the Commission's priority on "A New Boost for Jobs, Growth and Investment", aims at promoting the development of skills and competences at all levels of education and training. Building on the experience of implementing the 2010 Bruges Communiqué, the Riga conclusions adopted at the Ministerial meeting in Riga on 22 June 2015, defined a set of five medium-term deliverables for the period 2015-2020. These include a new focus on the promotion of work-based learning, quality assurance mechanisms, access to vocational education and training in a LLL perspective, training and professional development of teachers, trainers and mentors, and further strengthening of the key competencies by initial and continuing vocational education and training. In this keynote a review will be given of the initiatives of the European Commission on the New Skills Agenda, and in particular on the development of key competences for the 21st century.

## Conference agenda at a glance | Wednesday, October 19

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### Conference venue: Forum

09:00-10:30hrs	<b>Registration</b> in the lobby of Forum <i>On site payment available</i>
10:30-12:00hrs	<b>Parallel Session I</b>
12:00-12:45hrs	<b>Lunch</b> in Grand Café of Forum <i>Registration and on site payment available during lunch in the lobby of Forum</i>
12:45-14:15hrs	<b>Opening of the conference</b> in room C222 in Forum  Mr. Geert van Rumund, Mayor of Wageningen 'Welcome to Wageningen'  Prof. dr. Arthur Mol, Rector Magnificus of Wageningen University & Research 'Welcome to Wageningen University & Research'  Prof. dr. Martin Mulder, Conference chair 'The theme and programme of Competence 2016'  <b>Keynote address</b>  Mr. Eric de Boer, Korn Ferry HayGroup, Amsterdam, The Netherlands, Senior Consultant HR 'Competence development and performance improvement'
14:15-14:30hrs	<b>Break</b> in front of room C222 in Forum
14:30-16:00hrs	<b>Parallel session II</b>
16:00-16:30hrs	<b>Break</b> in front of room C222 in Forum
16:30-18:00hrs	<b>Parallel session III</b>
18:00-19:30hrs	<b>Conference Reception</b> in Grand Café of Forum

## Conference agenda at a glance | Thursday, October 20

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### Conference venue: Forum

<b>08:00-09:00hrs</b>	<b>Registration</b> in lobby of Forum <i>On site payment available</i>
<b>09:00-10:30hrs</b>	<b>Parallel session IV</b>
<b>10:30-11:00hrs</b>	<b>Break</b> in front of room C222 in Forum
<b>11:00-12:00hrs</b>	<b>Keynote address</b> in room C222 in Forum  Prof. dr. Reinhold Weiss, Federal Institute for Vocational Education and Training (BIBB), Bonn, Germany, Deputy President and Head of the Research 'Status of competence research in Germany: approaches – results'
<b>12:00-13:00hrs</b>	<b>Lunch</b> in Grand Café of Forum <i>Registration and on site payment available during lunch in the lobby of Forum</i>
<b>13:00-14:30hrs</b>	<b>Parallel session V</b>
<b>14:30-15:00hrs</b>	<b>Break</b> in front of room C222 in Forum
<b>15:00hrs</b>	<b>Transit to the Aula</b> <i>By bus or on your own – free transit by bus is arranged</i>
<b>16:00-17:00hrs</b>	<b>Public farewell address</b> at the Aula of Wageningen University & Research  Prof. Dr. Martin Mulder 'Competence for Life: A Review and Perspective for the Future'
<b>17:00-18:30hrs</b>	<b>Public Reception</b> at the Aula of Wageningen University & Research
<b>18:30-19:30hrs</b>	<b>Transit to Hotel De Wageningsche Berg</b> <i>By bus or on your own – free transit by bus is arranged</i>
<b>20:00-22:30hrs</b>	<b>Conference Dinner</b> at Hotel De Wageningsche Berg <i>Additional fee applies</i>
<b>23:00-23:30hrs</b>	<b>Transit to Conference hotel Hof van Wageningen</b> <i>By bus or on your own – free transit by bus is arranged</i>

## Conference agenda at a glance | Friday, October 21

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### Conference venue: Orion

<b>08:00-09:00hrs</b>	<b>Registration</b> in the lobby of Orion <i>On site payment available</i>
<b>09:00-10:30hrs</b>	<b>Parallel session VI</b>
<b>10:30-11:00hrs</b>	<b>Break</b> at Restaurant east-side in Orion
<b>11:00-12:00hrs</b>	<b>Keynote address</b> in room C1005/1040 in Orion  Mr. João Santos, Directorate General for Employment, Social Affairs and Inclusion Acting Head of Unit C5, Vocational training and adult education 'The New Skills Agenda and the development of key competences'
<b>12:00-13:15hrs</b>	<b>Networking lunch</b> at restaurant east-side in Orion
<b>13:15-14:45hrs</b>	<b>Open space for business meetings</b> at restaurant east-side in Orion



## Detailed conference agenda | Wednesday, October 19

### Conference venue: Forum

**09:00-10:30hrs**      **Registration** in the lobby of Forum  
*On site payment available*

**10:30-12:00hrs**      **Parallel Session I**

### I.1 Symposium

**Session title:** Introduction of competence approach in the reform of school-based initial vet-systems: Challenges, Pitfalls, Impacts

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C217

**Chair:** Vidmantas Tūtlys

**Discussant:** Jonathan Winterton

**Papers:**

- Introduction of competence-based approaches in the reform of school-based initial VET systems: issues for research  
*Jonathan Winterton*
- Challenges in understanding and measuring competencies in the school-based VET systems  
*Samo Pavlin, Vidmantas Tūtlys*
- Impact of the competence approach to the reforms of the initial VET system in Italy and Lithuania  
*Giuseppe Tacconi, Vidmantas Tūtlys*

### I.2 Paper session

**Session title:** Competence theory, management and leadership

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C221

**Chair:** Hildert Zoethout

**Papers:**

- Improving Leadership Competencies and Performances with a Microteaching Approach  
*Andreas Rupp*
- Beyond a new language for competence: a discussion on how to implement the idea of competence  
*Giuditta Alessandrini, Claudio Pignalberi, Valerio Massimo Marcone*

### I.3 Symposium

**Session title:** Getting a Grip on Boundary Crossing Learning

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C214

**Chair:** Carla Oonk

**Discussant:** Ilya Zitter

**Papers:**

- Learning across boundaries during the design and implementation of a hybrid learning configuration  
*Petra Cremers*
- Stimulating students' boundary crossing learning in the multi-stakeholder Regional Learning Environment  
*Carla Oonk, Judith Gulikers*
- Teaching and learning reflexivity in problem-oriented inter- and transdisciplinary research  
*Karen Fortuin, Kris van Koppen*

## Detailed conference agenda | Wednesday, October 19 *continued*

### I.4 Symposium

**Session title:** Changing the paradigm of Master's admission in Europe

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C218

**Chair:** Kees Kouwenaar

**Discussant:** Kees Kouwenaar

**Papers:**

- Development and testing of competency-based admission  
*Kees Kouwenaar*
- Evidence base of master's admission: facts and perceptions on master's admission for internal, domestic and international applicants  
*Irina Ferencz*
- Developing tools to support Master's admission for a diverse classroom in the Lithuanian Higher Education system  
*Inez Meurs*
- Case study Vrije Universiteit Amsterdam  
*Adrian Verkleij*

### I.5 Symposium

**Session title:** Computer-Based Assessment of Transversal Competences: The Case of Problem Solving Competence

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C317

**Chair:** Christoph Niepel

**Discussant:** Christoph Niepel

**Papers:**

- Computer based Assessment [CBA]: An appropriate approach to measure professional problem-solving competence for the occupation of electronics technicians for automation technology [ETAT]?  
*Felix Walker, Nico Link, Stephan Abele, Reinhold Nickolaus*
- Do the constructs complex problem solving, comprehension skill, technological knowledge and general cognitive ability explain task success in a performance-based ICT skills test?  
*Lena Engelhardt, Johannes Naumann, Frank Goldhammer, Andreas Frey, Katja Hartig, Holger Horz, Kathrin Kuchta, S. Franziska C. Wenzel*
- The role of ICT usage in problem solving achievement: Findings from the PISA 2012 data  
*Maša Pavlović, Christoph Niepel, Samuel Greiff*

### I.6 Symposium

**Session title:** Fostering Argumentation Competence in Higher Education

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C314

**Chair:** Omid Noroozi

**Discussant:** Harm Biemans

**Papers:**

- Effects of Computer-Supported Argumentation Scripts on Students domain specific knowledge gain and attitudinal change  
*Omid Noroozi, Hans Trampler*
- Enhancing the Quality of Argumentation in National and International Food Law through Argumentation-Based Computer-Supported Collaborative Learning (ABCSCCL)  
*Kai Purnhagen, Omid Noroozi*
- Examining the Impact of Modern Teaching Methods in Creating Argumentation Competency among Entrepreneurship Students  
*Khoshghadam Khaledi, Mohammad Chizari*

## Detailed conference agenda | Wednesday, October 19 *continued*

### I.7 Symposium

**Session title:** Encouragement of sustainable behaviour in school and work settings

**Date/time/place:** Wednesday October 19, 10:30-12:00hrs; Forum – room C521

**Chair:** Vincent Blok

**Discussant:** Renate Wesselink

**Papers:**

- To increase employees' PEB both the management and organisational level should be put in place  
*Renate Wesselink, Vincent Blok, Jenno Ringersma*
- Encouraging Students Pro Environmental Behaviour  
*Piety Runhaar, Klaartje Wagenaar, Renate Wesselink*
- Integrating sustainability in education: stimulating active involvement of stakeholders for an integrated vision on sustainability in vocational education  
*Anne Remmerswaal, Renate Wesselink, Arjen Wals*

**12:00-12:45hrs**      **Lunch** in Grand Café of Forum  
*Registration and on site payment available during lunch in the lobby of Forum*

**12:45-14:15hrs**      **Opening of the conference** in room C222 in Forum

Mr. Geert van Rumund, Mayor of Wageningen  
'Welcome to Wageningen'

Prof. dr. Arthur Mol, Rector Magnificus of Wageningen University & Research  
'Welcome to Wageningen University & Research'

Prof. dr. Martin Mulder, Conference chair  
'The theme and programme of Competence 2016'

**Keynote address**

Mr. Eric de Boer, Korn Ferry HayGroup, Amsterdam, The Netherlands,  
Senior Consultant HR  
'Competence development and performance improvement'

**14:15-14:30hrs**      **Break** in front of room C222 in Forum

**14:30-16:00hrs**      **Parallel session II**

### II.1 Symposium

**Session title:** Competence in crisis

**Date/time/place:** Wednesday October 19, 14:30-16:00hrs; Room C217

**Chair:** Jonathan Winterton

**Discussant:** Michael Gessler

**Papers:**

- Restructuring and the crisis of competence  
*Jonathan Winterton*
- Skills mismatches across the European Union  
*Samo Pavlin, Ivan Svetlik*
- Skilled migration in the European Union  
*Vidmantas Tutlys, Jonathan Winterton*
- Skills implications of migration and irregular labour in ASEAN  
*Kenneth Cafferkey, Tony Dundon, Jonathan Winterton*

## Detailed conference agenda | Wednesday, October 19 *continued*

### II.2 Paper session

**Session title:** Training, Development and Portfolios

**Date/time/place:** Wednesday October 19, 14:30-16:00hrs; Forum – room C221

**Chair:** Thomas Lans

**Papers:**

- Investigating Instructional Design Competencies in a Fast-paced Changing Environment  
*William J. Rothwell, Aileen Zaballero, Tataleni Asino, Jessica Briskin, Kristopher Newbauer*
- Does training improve skill match?  
*Francesca Sgobbi*
- The influence of values on competency models in the profession of Training and Development  
*Saul Carliner*
- Social Competences as Part of the Professional Competence Portfolio and its Implementation in Practical Surroundings by the Example of Medical Assistants  
*Tanja Tschöpe, Moana Monnier, Agnes Dietzen*

### II.5 Paper Session

**Session title:** Competence assessment and measurement

**Date/time/place:** Wednesday October 19, 14:30-16:00hrs; Forum – room C317

**Chair:** Glen Shinn

**Papers:**

- Competence assessment in early vocational orientation  
*Carolin Kunert*
- The PIAAC Italy survey  
*Fabio Roma, Gabriella Di Francesco*
- Soft skills as most significant predictor of getting job: Evidence from using new measurement tool  
*Jiri Balcar, Lenka Filipova*

### II.6 Symposium

**Session title:** Fostering 21st Century Skills in Higher Education

**Date/time/place:** Wednesday October 19, 14:30-16:00hrs; Forum – room C314

**Chair:** Omid Noroozi

**Discussant:** Stan van Ginkel

**Papers:**

- Becoming Globally Competent through Student Mobility  
*Dine Brinkman, Vitaliy Popov*
- The effects of First-Order And Second-Order Scaffolding on Computer-Supported Collaborative Argumentation: A Systematic Review  
*Anahuac Valero Haro, Omid Noroozi, Harm Biemans*
- Towards a Set of Design Principles for Developing Oral Presentation Competence in Higher Education  
*Stan van Ginkel, Judith Gulikers, Harm Biemans, Martin Mulder*

## Detailed conference agenda | Wednesday, October 19 *continued*

### II.7 Symposium

**Session title:** Competence, sustainable development and higher education

**Date/time/place:** Wednesday October 19, 14:30-16:00hrs; Forum – room C521

**Chair:** Renate Wesselink

**Papers:**

- Design principles for Living Lab's aiming at sustainable development: The role of higher education in Living Labs  
*Loes Witteveen, Rik Eweg, Toine Smits, Wiepke Voskamp-Harkema*
- Higher Education and Competence for Responsible Research and Innovation (RRI): Towards a Research Agenda  
*Valentina Tassone, Hansje Eppink, Vincent Blok, Renate Wesselink*
- Competencies for interdisciplinary teamwork in agroecology: Norway and India  
*Anna Marie Nicolaysen, Parthiba Basu, Geir Hofgaard Lieblein, Anshuman Das, Tor Arvid Breland, Barbara Smith*

**16:00-16:30hrs**                      **Break** in front of room C222 in Forum

**16:30-18:00hrs**                      **Parallel session III**

### III.1 Paper session

**Session title:** Developments in Competence-based Agricultural Education and Extension

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C217

**Chair:** Thomas Lans

**Papers:**

- Conceptualizing Bachelor's Degree Agricultural Education Curricula for 2050  
*Glen Shinn, Gary Briers, David Knauft, Maria Navarro*
- Design of a competency based learning (CBL) curriculum for Agricultural Training Institutes (ATIs) in South Africa: A Community of Learning and Action (COLA) approach  
*Bernd Lutge, Petronella Chaminuka, Juan Ceballos, Charles Andrew Francis, Edwin Ostergaard*
- Agricultural Extension Professionals' Perceptions of Core Competencies in Nepal  
*Ramjee Ghimire, Murari Suvedi*

### III.2 Paper session

**Session title:** Competence, performance, commitment and pay

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C221

**Chair:** Hildert Zoethout

**Papers:**

- Competencies, Job knowledge, Personality and Performance  
*Rendel de Jong, Charlotte Koppen de Neve, Paul Boer*
- Supporting Temporary Agency Workers' affective commitments: exploring the role of expected and fulfilled opportunities for competence development  
*Nienke Woldman, Piety Runhaar, Renate Wesselink, Martin Mulder*
- Soft-skills and labour market outcomes: the case of young French graduates  
*Ines Albadea, Jean-Francois Giret*
- Gaps between actual and preferred career paths among professional employees  
*Michal Biron, Ravit Eshed*



## Detailed conference agenda | Wednesday, October 19 *continued*

### III.3 Paper session

**Session title:** Learning environments at the boundaries between work and education

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C214

**Chair:** Loek Nieuwenhuis

**Papers:**

- Education at the boundary of school and work: a typology of learning environments in vocational education  
*Erica Bouw, Ilya Zitter, Elly de Bruijn*
- Investigating perceptions of learning environments and apprenticeship in the Finnish context  
*Heta Rintala, Petri Nokelainen, Laura Pylväs*
- Workplace learning in competence-based TVET  
*Loek Nieuwenhuis*

### III.4 Symposium

**Session title:** Mind the Gap! From competence based measurement to competence based teaching

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C218

**Chair:** Geoff Hayward

**Discussant:** Hubert Ertl

**Papers:**

- Back to work bridging the gap between input and output  
*Peter Sloane*
- Competence Development - From mind the gaps to mind the steps  
*Bernadette Dilger*
- Competence in England and the legacy of NVQs  
*Geoff Hayward*

### III.5 Paper session

**Session title:** Competence assessment and measurement continued

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C317

**Chair:** Machiel Bouwmans

**Papers:**

- Structure modelling and achievement scales for electronics technicians' knowledge at the end of vocational training  
*Leo van Waveren*
- Self-perceptions of the match between acquired and required competences and their antecedents  
*Jan Nijhuis*

### III.6 Symposium

**Session title:** Fostering Oral Presentation Competence in Higher Education

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C314

**Chair:** Stan van Ginkel

**Discussant:** Stan van Ginkel

**Papers:**

- Fostering Oral Presentation Performance: Does the Quality of Feedback Differ When Provided by the Teacher, Peers or Peers Guided by Tutor?  
*Stan van Ginkel, Judith Gulikers, Harm Biemans*
- Practice and improve using the Presentation Trainer  
*Jan Schneider, Dirk Börner, Peter van Rosmalen*
- A Multimodal System For Public Speaking Anxiety: A Positive Computing Perspective  
*Fiona Dermody, Alistair Sutherland*

## Detailed conference agenda | Wednesday, October 19 *continued*

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### III.7 Symposium

**Session title:** Designing higher education learning environments to develop key competencies for sustainability

**Date/time/place:** Wednesday October 19, 16:30-18:00hrs; Forum – room C521

**Chair:** Petra Cremers

**Discussant:** Karen Fortuin

**Papers:**

- Approaches of science-practice interaction: How to relate multi-stakeholder knowledge and science knowledge?  
*Roland Scholz, Gerald Steiner*
- Designing Learning Environments for Transboundary Competence as a Key Competence in Higher Education for Sustainable Development  
*Joop de Kraker*
- Shaping a mode 2 concept of university education to tackle real life problems  
*Ulrike Gelbmann, Anton Peskoller*
- The role of preconceptions of sustainable development for perceived professional relevance and the development of inter- and transdisciplinary competencies among first year students  
*Anna Sundermann, Daniel Fischer*

**18:00-19:30hrs**

**Conference Reception** in Grand Café of Forum

## Detailed conference agenda | Thursday, October 20

### Conference venue: Forum

**08:00-09:00hrs**      **Registration** in lobby of Forum  
*On site payment available*

**09:00-10:30hrs**      **Parallel session IV**

#### IV.1 Paper session

**Session title:** Competence-based education: legislation, realisation and effects

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C221

**Chair:** Harm Biemans

**Papers:**

- Federal Legislation and the Potential Impact on Competency-based Education in the U.S.  
*Kirby Barrick*
- Realization of Competence-based Education and Training: Teachers', Students' and Graduates' Perspectives  
*Getachew Habtamu Solomon, Renate Wesselink, Omid Noroozi*
- Exploring Connections of Teacher Interpersonal Behaviour, Student Motivation and Competency Level  
*Zainun Misbah, Judith Gulikers, Wahyu Widiharso, Martin Mulder*

#### IV.2 Symposium

**Session title:** Human Resource Management in schools. Exploring its potential for enhancing teachers' competence, motivation and opportunities to perform

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C213

**Chair:** Piety Runhaar

**Discussant:** Ton Bruining

**Papers:**

- Beyond induction; a comprehensive view on novice teachers' induction in Dutch secondary education  
*Piety Runhaar, Judith Gulikers, Renate Wesselink*
- Linking principals configuration of a bundle of HR practices for new teachers to teacher outcomes  
*Eva Vekeman, Geert Devos*
- Teacher assignment in secondary education: a mixed method study  
*Melissa Tuytens, Geert Devos*
- Explaining teachers' career competence. Exploring the roles of teachers  
*Piety Runhaar, Marjan Vermeulen, Evelien Loeffen*

#### IV.3 Symposium

**Session title:** Competence development for inter- and transdisciplinary research

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C226

**Chair:** Carla Oonk

**Discussant:** Joop de Kraker

**Papers:**

- Inquiry based research in action  
*Marjolein Zweekhorst, Wanda Konijn*
- Learning to design for the unknown: educational designing in an undergraduate transdisciplinary setting  
*Tanja Golja*
- What are universities for? - Integrative Design-Based Inquiry as one possible answer  
*Binbin Pearce, Christian Pohl*

## Detailed conference agenda | Thursday, October 20 *continued*

### IV.4 Symposium

**Session title:** Formative assessment with effect

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C318

**Chair:** Judith Gulikers

**Discussant:** t.b.a.

**Papers:**

- What are methods and conditions of formative assessment that are effective for learning? A review study  
*Dominique Sluijsmans, D. Joosten-ten Brinke, Cees van der Vleuten*
- A systematic review of prerequisites for implementing formative assessment in classroom practice  
*Kim Schildkamp, Wilma Kippers, Fabienne van der Kleij, Maaïke Heitink, Inge Hoogland, Anne Dijkstra, Bernard Veldkamp*
- Teachers' formative assessment practices in the classroom with effects on students  
*Judith Gulikers, Liesbeth Baartman*

### IV.5 Paper session

**Session title:** Professional competence in finance and health

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C317

**Chair:** James Lindner

**Papers:**

- Financial Literacy: A fuzzy construct. A comparison and evaluation of the conceptualisations and measurement models in the financial domain  
*Sabrina Patitz, Marina Haves, Thomas Retzmann*
- A Comparison of Defining Nursing Competence in Europe and the United States  
*Jessica Shearer, Johanna Lasonen, Riitta Meretoja*
- The Influence of Emotional and Social Competencies on Collaboration in Cross-Cultural Healthcare Settings  
*Aileen Zaballero, William J. Rothwell*

### IV.6 Symposium

**Session title:** Entrepreneurship Education with Impact: Learning from European Experiences

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C314

**Chairs:** Marge Täks, Marco van Gelderen

**Discussant:** Marge Täks

**Papers:**

- The impact of entrepreneurial competency training  
*Marco van Gelderen*
- The effects of education for and through entrepreneurship: Different approaches, different outcomes  
*Kåre Moberg, Pernille Berg*
- Development and Application of the Opportunity Identification Competence Assessment Test (OICAT) in Higher Education  
*Yvette Baggen, Ana Naia*
- The influence of learning orientation and context on market orientation of small holding farmers  
*Emilio Pindado, Thomas Lans*

## Detailed conference agenda | Thursday, October 20 continued

### IV.7 Symposium

**Session title:** Transition thinking Planet, People, Profit and related competence

**Date/time/place:** Thursday October 20, 09:00-10:30hrs; Forum – room C521

**Chair:** Frank de Jong

**Discussant:** Niek van den Berg

**Papers:**

- Transitioning toward healthier dietary patterns  
*Esther Nederhof*
- Competence for transformative business: The role of new business models in the agricultural transition  
*PJ Beers, Erwin Bouwmans*
- Valorisation of food waste in different stages of the food production value chain  
*Koen Dittrich, Geert Sol, Maud Smits, Mandy van Vught*
- Responsive and responsible education: eco-semiotic learning competence  
*Frank de Jong*

**10:30-11:00hrs**      **Break** in front of room C222 in Forum

**11:00-12:00hrs**      **Keynote address** in room C222 in Forum

Prof. dr. Reinhold Weiss, Federal Institute for Vocational Education and Training (BIBB), Bonn, Germany, Deputy President and Head of the Research 'Status of competence research in Germany: approaches – results'

**12:00-13:00hrs**      **Lunch** in Grand Café Forum  
*Registration and on site payment available during lunch in the lobby of Forum*

**13:00-14:30hrs**      **Parallel session V**

### V.1 Symposium

**Session title:** The Scope and Practice of the so-called Occupational Sciences: An updated VET Science or just a work- and competence-based Research Methodology?

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C221

**Chairs:** Ludger Deitmer, Michael Gessler, Lars Heinemann

**Discussant:** Jonathan Winterton

**Papers:**

- The Scope of Research  
*Ludger Deitmer*
- The Practice of OC-Research  
*Michael Gessler*
- Discussion: Science or Methodology?  
*Ludger Deitmer, Michael Gessler, Lars Heinemann*



## Detailed conference agenda | Thursday, October 20 continued

### V.2 Symposium

**Session title:** Team learning in the context of teacher teams

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C213

**Chair:** Hildert Zoethout

**Discussants:** Elly de Bruijn, Ton Bruining

**Papers:**

- Team learning in teacher teams: a systematic review  
*Eva Kunst, Marianne van Woerkom, Hildert Zoethout, Rob Poell*
- Using transactivity as an analytical framework to understand quality of team learning  
*Hildert Zoethout, Renate Wesselink, Piety Runhaar, Martin Mulder*
- The development of distributed leadership through top-down and bottom-up processes  
*Machiel Bouwmans, Piety Runhaar, Renate Wesselink, Martin Mulder*

### V.3 Paper session

**Session title:** Knowledge, Competence Development and Excellence in Higher Education

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C226

**Chair:** Stan van Ginkel

**Papers:**

- A unified model of knowledge bases for subject-matter competence in bachelor degree programmes of technical teachers  
*Kees-Jan van Dorp, Fons Dehing*
- Whole task instruction as the key to effective competence-oriented learning arrangements  
*Iwan Wopereis, Jimmy Frerejean, Saskia Brand-Gruwel*
- Competency Development in Higher Education through Intentional Change Theory and Problem Based Learning: An example from a Spanish Law School  
*Basak Canboy, Joan Manuel Batista-Foguet*
- Professional excellence: defining learning outcomes for honours higher education  
*Melissa Oudshoorn-Fuller, Patricia Robbe, Marca C.V. Wolfensberger*

### V.4 Symposium

**Session title:** Innovative approaches to modelling and measuring teachers' competence

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C318

**Chair:** Judith Gulikers

**Discussant:** Agnes Dietzen

**Papers:**

- Swiss Commercial VET Teachers content and pedagogical content knowledge  
*Doreen Holtsch, Franz Eberle*
- Assessing Subject-Specific Competencies in Teacher Education in Mathematics and Economics  
*Christiane Kuhn, Olga Zlatkin-Troitschanskaia, Hannes Saas, Sebastian Brückner*
- Important decisions demand cognitive effort: Teachers flexible choice of information processing after changing the accountability of decision situations  
*Sabine Krolak-Schwerdt, Thomas Hörstermann, Sabine Glock, Ines Böhmer, Cornelia Gräsel*
- Does Comparative Judgement result in valid scores/rank orders? Evidence from CJ research on argumentative writing and mathematical problem solving  
*Marije Lesterhuis, Kristof Vermeiren, Sven de Maeyer, Liesje Coertjens, Maarten Goossens, San Verhavert*

## Detailed conference agenda | Thursday, October 20 continued

### V.5 Symposium

**Session title:** Authenticity and competence assessment

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C317

**Chair:** Frank Achtenhagen, Susanne Weber

**Discussant:** Susanne Weber

**Papers:**

- Authenticity and competence assessment  
*Frank Achtenhagen*
- Regarding the Validity of Competence Based Assessments – Conceptualizations and Examples of Application  
*Viola Klotz, Esther Winther, Julia Sangmeister*
- Model-based authentic assessment of trainees' intrapreneurship competence  
*Susanne Weber, Sandra Bley, Michaela Wiethe-Körprich, Christine Kreuzer*
- Authenticity and Efficiency in Assessing Domain-Specific Problem-Solving Competence—Conflicting Goals in Large Scale Assessments?  
*Andreas Rausch, Kristina Kögler*

### V.6 Paper session

**Session title:** Emotional, social, critical thinking, complex problem solving and creativity competence

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C314

**Chair:** Michiel Hupkes

**Papers:**

- Reconstructing actors perspectives as additional data source within current diagnostic procedures of social competencies in VET  
*Burkhard Vollmers, Werner Kuhlmeier*
- Development of vocational expertise in Finnish apprenticeship training: The actors' point of view  
*Laura Pylväs, Petri Nokelainen*
- Critical Thinking Competence: If We Build it Will they Learn  
*James Lindner, Amy Harder, Nicole Stedman, Robert Strong, Grady Roberts, Kim Dooley, Christopher Stipling, Lisa Lundy*
- Unleashing the creative potential of VET students  
*Antje Barabasch*

### V.7 Symposium

**Session title:** Sustainability at a micro level

**Date/time/place:** Thursday October 20, 13:00-14:30hrs; Forum – room C521

**Chair:** Renate Wesselink

**Discussant:** Marco Rieckmann

**Papers:**

- Leadership and the Creation of CSR  
*André Nijhof*
- Developing Corporate Social Responsibility Competence: Considering the Roles of Learning Goal Orientation and Psychological Learning Climate  
*Eghe Osagie, Renate Wesselink, Piety Runhaar, Martin Mulder*
- The role of moral decision making in recognizing opportunities for sustainable entrepreneurship  
*Lisa Ploum, Vincent Blok, Thomas Lans, Onno Omta*

## Detailed conference agenda | Thursday, October 20 *continued*

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<b>14:30-15:00hrs</b>	<b>Break</b> in front of room C222 in Forum
<b>15:00hrs</b>	<b>Transit to Aula</b> <i>By bus or on your own – free transit by bus is arranged</i>
<b>16:00-17:00hrs</b>	<b>Public farewell address</b> at the Aula of Wageningen University & Research  Prof. Dr. Martin Mulder 'Competence for Life: A Review and Perspective for the Future'
<b>17:00-18:30hrs</b>	<b>Public Reception</b> at the Aula of Wageningen University & Research
<b>18:30-19:30hrs</b>	<b>Transit to Hotel De Wageningsche Berg</b> <i>By bus or on your own – free transit by bus is arranged</i>
<b>20:00-22:30hrs</b>	<b>Conference Dinner</b> at Hotel De Wageningsche Berg <i>Additional fee applies</i>
<b>23:00-23:30hrs</b>	<b>Transit to Conference Hotel Hof van Wageningen</b> <i>By bus or on your own – free transit by bus is arranged</i>

## Detailed conference agenda | Friday, October 21

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### Conference venue: Orion

**08:00-09:00hrs**      **Registration** in lobby of Orion  
*On site payment available*

**09:00-10:30hrs**      **Parallel session VI**

#### VI.1 Paper session

**Session title:** Linking Competence-based vocational and higher education

**Date/time/place:** Friday October 21, 09:00-10:30hrs; Orion – room C3034

**Chair:** Harm Biemans

**Papers:**

- Compatible competence orientation of higher and vocational education? Conceptual considerations and insights for education development  
*Volker Rein*
- Promoting Students' Transitions to Higher Vocational Education  
*Harm Biemans, Hans Mariën, Erik Fleur, Hilde Tobi, Loek Nieuwenhuis, Piety Runhaar*

#### VI.2 Symposium

**Session title:** Competence in crossing sociocultural boundaries

**Date/time/place:** Friday October 21, 09:00-10:30hrs; Orion – room C3015

**Chair:** Frank de Jong

**Discussant:** Renate Wesselink

**Papers:**

- Boundary practices of educators and researchers collaborating on professional issues  
*Niek van den Berg*
- Cross-cultural competence as a basis for intercultural communication in the classroom  
*Toon van der Ven*
- Competence development of internationally mobile students  
*Hans Corten, Frank de Jong, Rolf van der Velden*
- Developing research behavior competence by crossing school and business borders  
*Frank de Jong*

#### VI.3 Paper session

**Session title:** Personal growth, argumentation and visual research

**Date/time/place:** Friday October 21, 09:00-10:30hrs; Orion – room C4014

**Chair:** Kirby Barrick

**Papers:**

- Searching for a theoretical framework: the role of the experienced meaningfulness and personal growth needs in competence development  
*Rainer Hensel*
- Effects of a Digital Guided Peer Feedback on Students argumentation competence learning and satisfaction  
*Omid Noroozi, Javad Hatami*
- Video for Data Collection; Exploring the development of a visual research competence  
*Angela Pachau, Loes Witteveen*

## Detailed conference agenda | Friday, October 21 *continued*

### VI.5 Paper session

**Session title:** Competence frameworks for professional development in extension

**Date/time/place:** Friday October 21, 09:00-10:30hrs; Orion – room C3030

**Chair:** Hansje Eppink

**Papers:**

- Organizing Human Capacity Development in Extension using a Priority Competency Framework  
*Amy Harder, James Lindner, Alan Hodges*
- Developing and Validating a Competence Profile for Development Agents: A Case Study  
*Chalachew Tarekegne Aniteneh, Renate Wesselink, Harm Biemans, Martin Mulder*
- Perceptions of Core Competencies of Agricultural Extension Workers in Cambodia  
*Murari Suvedi, Ty Channa, Ramjee Ghimire*

### VI.6 Symposium

**Session title:** Multiple methods of developing intercultural competence

**Date/time/place:** Friday October 21, 09:00-10:30hrs; Orion – room C4016

**Chair:** Dine Brinkman

**Discussant:** Vitaliy Popov

**Papers:**

- Development of intercultural competencies during international internships using a rubric  
*Judith Gulikers, Piety Runhaar, Dine Brinkman*
- English at Work: an international virtual collaboration project  
*Joelle Hietbrink, Julia Huisman, Ivan Berazhny, Liisa Wallenius*
- The effect of a blended learning tool on intercultural competence development  
*Pauline Vromans*

### VI.7 Symposium

**Session title:** Sustainability Competence: meanings, possibilities and constraints

**Date/time/place:** Friday October 21, 09:00-10:30hrs; Orion – room C4030

**Chair:** Arjen Wals

**Discussant:** Arjen Wals

**Papers:**

- Are competences appropriate for educators of sustainability  
*Paul Vare*
- Critical emotional awareness as a key competence in education for a sustainable future  
*Maria Ojala*
- Developing Anticipatory Competence in Higher Education for Sustainable Development  
*Senan Gardiner, Marco Rieckmann*
- Environmental Literacy: Combining Sustainability Competences in Knowledge, Attitudes and Behaviour  
*Franz Bogner, Florian Kaiser*

**10:30-11:00hrs**      **Break** at restaurant east-side in Orion

**11:00-12:00hrs**      **Keynote address** in room C1005/1040 in Orion

Mr. João Santos, Directorate General for Employment, Social Affairs and Inclusion  
Acting Head of Unit C5, Vocational training and adult education  
'The New Skills Agenda and the development of key competences'

**12:00-13:15hrs**      **Networking lunch** at restaurant east-side in Orion

**13:15-14:45hrs**      **Open space for business meeting** at restaurant east-side in Orion



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