

# The Higher Education Conference 2019

Abstract book

## Parallel Session 1 | Monday 28/10 | 11:15 – 12:45

### Parallel Session 1.1: Symposium

Location: KSH 00A11

Track 1: Learning, Teaching & Assessment

#### **The value and effectiveness of different feedback strategies in improving students' learning in higher education**

Chair(s): **Marco Van Hout** (Amsterdam University of Applied Sciences), **Dimitrios Vlachopoulos** (Amsterdam University of Applied Sciences)

Discussant(s): **Georgeta Ion** (Universitat Autònoma de Barcelona)

The current focus of universities is the preparation of future professionals. To achieve this aim, innovative teaching strategies are deployed, including the way instructors provide feedback. There is a plethora of research on the importance of feedback in enhancing students' learning in higher education and feedback has also been directly related with the professionalization of the teaching practice. However, feedback is still considered a complex issue. Most university programs welcome students with a range of academic skills, cultures, backgrounds, and learning preferences. In addition, universities employ instructors with different pedagogical background and approaches. These differences are also reflected in the way feedback is given and perceived. The purpose of this symposium is to examine the value and effectiveness of different feedback strategies in improving students' learning and to propose some good practices for educational practitioners. In this context, a research on peer feedback and its contribution to developing students' assessment literacy will open the symposium. This quantitative research counted on the participation of 177 second year bachelor students in Spain, who reflected on the impact of peer feedback on the development of their assessment skills, which are fundamental not only for their studies but also for their development as professional practitioners. Findings showed that students being involved in peer feedback activities perceived it as a valuable exercise to learn new assessment strategies, detect their strengths and weaknesses and enhance their commitment with assessment as a process. The second presentation of this symposium is about a research on the use of multimedia feedback messages in higher education. More specifically, this qualitative research explored, through semi-structured interviews, the perceptions of 16 students in the Netherlands on the use of video feedback messages for the assessment of their work. The obtained results were in line with the cognitive theory of multimedia learning, according to which deeper learning occurs with words and pictures rather than just with words. The third presentation of this symposium is about a quantitative research on the cultural influences on the way students perceive the use of learning analytics to provide real-time feedback on their progress. Using Hofstede's Cultural Dimensions model as a reference, 179 online postgraduate students were classified as high or low in each of the dimensions and their perceptions were analyzed with a standardized instrument. The relevant differences found highlight the need of considering the cultural context for the development of learning analytics policies and practices.

*Presentations of the Symposium:*

#### **Peer feedback for Self-regulated learning in higher education**

**Georgeta Ion, David Rodríguez Gómez**

Universitat Autònoma de Barcelona

Peer feedback occupies a central place among the strategies directed to improve students learning, being associated to the "assessment for learning" approach. Current research has shown that its use in higher education can enhance learning and student performance, problem solving skills, metacognition and self-regulated learning. The aim of this quantitative research is to explore how peer-feedback contributes to develop students' assessment literacy. 177 second-year university students in Spain were involved in assessing and grading their peers' contribution in a group-work assignment and they answered a survey through which their perceptions on the impact of peer feedback was analyzed. The findings show that students being involved in peer feedback practice perceive it as a valuable exercise to develop their assessment competence, to understand and uptake assessment criteria, learn new assessment strategies, identify their strengths and weaknesses, and enhance their commitment with assessment as a process.

#### **The use of multimedia feedback messages as a strategy to enhance students' learning**

**Dimitrios Vlachopoulos<sup>1</sup>, Marco Van Hout<sup>1</sup>, Ricardo Tejeiro<sup>2</sup>**

<sup>1</sup>Amsterdam University of Applied Sciences, <sup>2</sup>University of Liverpool Online/ Laureate Online Education

Research has demonstrated that feedback can have both positive and negative impact on students. In this context, it is important to understand feedback mechanisms and more specifically, the construction of feedback. In higher education, feedback is usually text-based and highlights mostly the weaknesses of the students' work and some of its strengths. However, technology offers a lot of opportunities to instructors to create feedback using pictures, narration and animation. This qualitative research explored, through semi-structured interviews, the perceptions of 16 students at a Dutch institution on the use of video feedback messages for the assessment of their work. The obtained results were in line with the cognitive theory of multimedia learning, according to which deeper learning occurs with words and pictures rather than just with words. Finally, students found this kind of feedback more personalized, attractive and easy to "digest", comparing to text-based feedback.

#### **Cultural differences in university students' expectations of feedback through learning analytics**

**Ricardo Tejeiro<sup>1</sup>, Alex Whitelock-Wainwright<sup>2</sup>, Dimitrios Vlachopoulos<sup>3</sup>**

<sup>1</sup>University of Liverpool Online/ Laureate Online Education, <sup>2</sup>Monash University, <sup>3</sup>Amsterdam University of Applied Sciences

With the growing application of Learning Analytics (LA), many students can now expect to receive real-time feedback and updates on their progress. The need for systematic and responsible LA approaches was recently recognized with the launching of the SHEILA (Supporting Higher Education to Integrate LA) project, which aims to assist European Higher Education Institutions to develop their LA policies. The development of the Student Expectations of Learning Analytics Questionnaire (SELAQ), within the SHEILA project, evidenced differences in the student answers across different countries. This quantitative research investigated whether those differences could be related to national cultures as assessed by Hofstede's Cultural Dimensions model, counting on the participation of 179 students from 57 countries enrolled in an English university. The study, which classified students as "high" or "low" in each of the dimensions, highlighted the need of considering the cultural context for the development of learning analytics policies and practices.

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## **Parallel Session 1.2: Paper**

*Location:* WBH 04A10

*Track 6:* Scholarship of Teaching and Learning

### **Experiences of faculty engaged in the scholarship of teaching and learning**

**Celia Frances Popovic, Alice Kim, Genevieve Maheux Pelletier, Mandy Frake Mistak, Salma Saleh, Laura Farrugia**  
York University, Canada

We investigated the experiences of faculty engaged in the Scholarship of Teaching and Learning (SoTL) research at a large university in South Western Ontario. The aim was to identify challenges that these researchers faced and how they could be best supported by the institutional teaching and learning centre. To this end, we interviewed 10 SoTL researchers to discuss their experiences conducting SoTL research, focusing on the following topics: 1) challenges faced; 2) solutions to challenges; 3) resources that the researchers wished they had access to while they were conducting their SoTL research. Common challenges that emerged across the interviews included time constraints to work on SoTL research, a lack of community, and a lack of background knowledge of the relevant SoTL literature. These challenges were often overcome by working alongside colleagues, as well as receiving support and engaging in offerings provided by the institutional teaching and learning centre.

### **Why do some university teachers engage in peer observations while others do not?**

**Ine Noben, Jan Folkert Deinum, Jasperina Brouwer, Adriaan Hofman**

University of Groningen, Netherlands, The

Learning in the workplace and collaboration among teachers as a form of continuing professional development has gained ground in higher education policies and institutions. One of the professional learning methods that has attracted a lot of interest is peer observation of teaching (POT), which inherently focuses on establishing a partnership between colleagues. To reduce the risk of aversion towards POT, the literature has focused on how to implement developmental POT schemes in favour of POT for evaluative purposes. However, the question still remains: why do some teachers engage in POT while others do not? This paper examines university teachers' perception of and engagement in POT as part of an eight-month-long team-based curriculum redesign project. Data from pre- and post-surveys and observations will be combined with interview data to examine what role university teachers' teaching beliefs, their professional network and work environment play in their perception of and engagement in POT.

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## **Parallel Session 1.3: Paper**

*Location:* WBH 04A22

*Track 2:* Students & Staff

### **Inclusive Education barriers & higher education teachers' awareness: Evidence from Pakistan**

**Malik Muhammad Wali Awan**

University of Management & Technology (UMT), Pakistan

Preece (2006) proclaimed inclusive education as a weapon against social inequality. United Nations' fourth Sustainable Development Goal (SDG) focuses on quality education based upon the Agenda 2030. The study was intended to understand the barriers to inclusive education with respect to teachers' awareness. The theoretical framework was adopted through the "guidelines for inclusion" provided by UNESCO (2006). Convenient sampling on random basis from three private universities of Lahore, Pakistan provided participants. Two focus groups were conducted consisting of six pre-service and six in-service educators. Emergent themes based on the thematic analysis showed that the educator's attitude, lack of teacher training, absence of awareness, level of comfort and curriculum development act as barriers to inclusive teaching. The findings implicated that proper training of the pre-service educators must be carried out prior to joining an educational institution and inclusive pedagogy must be incorporated in the curriculum of teacher training academic programs.

### **Moving to a learner-oriented approach to teaching: The role of teachers' collective learning processes**

**Hanneke Assen**

NHL Stenden University of Applied Sciences, Netherlands, The

Teachers in a learner-oriented approach to teaching and learning are expected to act as an activator, observer and evaluator of the students' learning processes. Using a questionnaire and observations, this study showed a discrepancy between teacher beliefs about teaching and learning and teaching behaviour. Teachers seem to struggle with transforming their learner-oriented beliefs into their teaching behaviour. During the interviews teachers indicated mainly external barriers that constrain them to apply learner-oriented interventions. Using a narrative approach, this study suggests that collective learning, including an external dialogue, stimulates teachers to reflect on their teaching behaviour from a helicopter view and to evaluate internal barriers. In addition, collective learning enables teachers to de- and re- position themselves towards a learner-oriented approach to teaching.

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#### **Parallel Session 1.4: paper**

*Location:* WBH 04A14

*Track 4:* Institutional Management & Leadership

##### **The intended synergy between research and teaching of universities of applied sciences in the Netherlands**

**Sanne R. Daas, Indira N. Z. Day, Didi M.E. Griffioen**

Amsterdam University of Applied Sciences, Netherlands, The

To ensure the proper education of "future proof" professionals, it is important that higher education institutions make strong connections between research and teaching. The combination of the institutional logics of research and teaching within the Universities of Applied Sciences (UASs) suggests that UASs should strive for synergy between these two logics. Before attempting to improve the synergy, we investigate UASs' current visions on connecting research and teaching and the subsequent synergistic effects. A grounded coding analysis of university-wide policy documents of six UASs in the Netherlands suggests that universities want to achieve synergistic effects on the level of the student, the professional, education, research, organization and professional practice. To achieve these synergistic effects the universities show a variety of research-teaching connections. The findings have implications for both local and national policy makers.

##### **Campus-wide self-assessment as research: change management of data collection, analysis, Action**

**Carra Hood**

Stockton University, United States of America

This presentation will examine higher education practices for researching or assessing itself. In many cases, these activities are conducted by individuals who lack training in assessment, which increases the possibility for mistakes and inadequacies in problem solving.

I will begin with an overview of higher education research in the form of self-assessment followed by an in-depth look at two forms of data collection, analysis, and interpretation: academic program period review and enrollment data strategies. The theoretical underpinnings for this presentation follow those outlined in change management theory, particularly as that theory applies to the higher education context. In-depth analysis will help to illustrate the ways in which change can be guided to productive ends on a campus to insure that data is appropriately utilized in decision making and to showcase instances when a lack of training in data interpretation has led to mistakes, ineffective actions, or accidental successes.

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#### **Parallel Session 1.5: Paper**

*Location:* WBH 04A18

*Track 3:* Curriculum Design

##### **Uncovering the relationship between informal spaces and learning in the library**

**Susan D Beatty**

University of Calgary, Canada

In order to determine the relationship between informal spaces in the library and student learning, a study was conducted wherein students who regularly use the library as a learning space were asked to comment on the nature of their learning in the library, the effect of the spaces on their learning and the value of the types of spaces available to them. Not surprisingly, the students' rationales were as varied as their learning needs, but most revealing, the value that they placed on the spaces was more complex than even they were aware of. This study uncovered an acknowledgement of the importance of informal learning spaces in libraries that bears further investigation

##### **The integration of research in the curriculum: an examination of research- related goals in undergraduate programs**

**Natalie Pareja Roblin, Marije van Meegen, Jason Nak, Cia Kesselaar, Didi Griffioen**

Hogeschool van Amsterdam, Netherlands, The

The development of research competences is increasingly regarded as key in the preparation of future professionals. This has led higher education institutions worldwide to make various efforts to integrate research throughout the curriculum of undergraduate programs. However, there is little empirical ground to guide such efforts. The current study aims to address this gap by examining the prevalence of research-related goals pursued in the intended curriculum of undergraduate programs at a

University of Applied Sciences. An analysis of course descriptions (N=~3000) of all undergraduate programs (N=70) was conducted using the taxonomy of research-related goals developed by Verburgh, Schouteden and Elen (2013). Preliminary results reveal that course descriptions often mention knowledge of research results and the development of instrumental research skills as learning goals; however, goals related to the development of researcher-like attitudes, such as curiosity and critical thinking, are less prominent. Implications for curriculum developers and policy makers are discussed.

## **Parallel Session 2 | Monday 28/10 | 13:45 – 15:15**

### **Parallel Session 2.1: Symposium**

*Location:* KSH 00A11

*Track 6:* Scholarship of Teaching and Learning

#### **Working mechanisms of professional innovation and learning labs.**

*Chair(s):* **Erik de Vries** (HAN)

*Discussant(s):* **Loek Nieuwenhuis** (HAN)

Professional innovation and learning labs (PILs) are environments where students, professionals, teachers, researchers and clients work and learn together on authentic complex problems. It intends to provide (lifelong) learning, to contribute to regional innovation and to solve professional and social issues by multi-stakeholder collaboration. PILs are a promising approach to shape the research-teaching-practice nexus. Nelen et al. (2010) show PILs having impact on labour market entrance of students and the productivity and innovativeness of enterprises. Rampersad (2015) argues that PILs offer the missing link between teaching and knowledge utilization. Narayanan, Olk and Fukami (2010) show that universities and businesses take advantage of cooperation by a reciprocal flow of new knowledge, accessible networks and human capital development.

The development and implementation of PILs is a complex intervention, shaped by its societal context and stakeholders involved. Vink et al. (2018) report that working with PILs requires major changes in organisational and professional routines, both inside the University of Applied Sciences (UAS) as well as in the networking with professional practices.

Within our UAS, differences in PILs configurations were seen, as well as different faculty development strategies and struggles when upscaling and implementing PILs. Faculty staff asked us to study the variations of PILs, answering the research question: What is it about professional innovation and learning labs that works, for whom, in what circumstances and how?

In order to answer this question, we use a realist approach (Pawson & Tilley, 1997; RAMESES-project, 2017). Realist review and evaluation try to explain in what respects, for whom, in what circumstances and why a programme works. The approach recognises that programmes are not universally successful. Realist research explores the link between context, mechanism and output of the intervention at stake (Wong et al., 2012). Mechanisms in realism are: “underlying entities, processes, or structures which operate in particular contexts to generate outcomes of interest.”

First, initial program theories on the development and implementation of PILs were formulated using an internal delphi panel and literature review. Second, these initial program theories were tested (reality check) in case studies. For seven PILs we collected documentary data on development and implementation, administrative data on student outcomes, interview data with stakeholders and participants (university, business and students; see for realist interview methodology: Manzano, 2016). In this symposium, we will present the outcomes of three case studies, discussing what works, for whom, in what circumstances and why.

*(References available on request).*

*Presentations of the Symposium*

#### **Professional innovation and learning labs in Health and Social Care: challenges in faculty development**

**Wietske Kuijer, Ivo Hendriks**

HAN

In the faculty of Health and Social Studies, 17 local PILs are developed, aimed at addressing local issues in Health and Social Care. Students from different disciplines (social work, paramedics and nursing studies) participate during 20 weeks in these PILs, as part of their bachelor course. Learning outcomes are defined on interprofessional learning (2nd year students) or interprofessional practice based research (4th year students). In an academic year, about 1200 students participate in PILs. In some PILs, knowledge centres (lectoraten) are involved, working on knowledge development and - circulation within long-term innovation and research agendas. Faculty development strategies on PILs were aimed at implementing interprofessional learning in bachelorcurricula and supporting embedded teachers in their new roles by providing an action learning programme. Challenges in alignment between practice and education and between bachelor courses were seen. In this paper, working mechanisms will be presented for PILs in Health and Social Care.

#### **Professional innovation and learning labs in the domain of engineering**

**Jan Oosting, Tanja Tankink**

HAN

In the domain of engineering, public-private partnerships has been established focussing on Sustainable Electrical Energy (SEE). This partnership aims for innovation, sufficient labour capacity and transforming knowledge into financially viable products and services. About 40 companies, educational institutions and public authorities are affiliated within this partnership.

In relation to education SEE is concerned with multi- and interdisciplinary business projects, conceptual innovative questions, internships and graduation assignments for students to work on. Furthermore, SEECE connects potential part-time bachelor students and potential master students with employers, gives high school pupils the opportunity for traineeships, Associate Degree, etcetera.

Challenges – more or less - were seen in terms of, for example: alignment between practice and education, quality assurance, expectations of stakeholders, transformative learning processes and facilitating co-creation.

In this paper, working mechanisms will be presented for PILs in Engineering.

#### **Partnerships in teacher training education.**

**Femke van Glansbeek - Timmermans**

HAN

Recent years the training of future teachers has changed. Teacher training institutes and schools more and more work together and much of the student training takes place at the workplace. This development is known as school-based teacher education, taking place in so called Professional Development Schools (PDS). This also leads to partnerships, between one or more primary and secondary teacher training institutes and one or more schools for primary, secondary and vocational education. Within the partnership not only the training of future teachers is a goal, but also the development of current teachers and school innovation.

The partnership we have studied includes a secondary teacher training institute and two schools for vocational education.

We will present how the Partnership is organized and how (future) teachers, teacher trainers and schools benefit from the cooperation.

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## Parallel Session 2.2: Paper

Location: WBH 04A10

Track 2: Students & Staff

### Academic life as art world? Balancing creativity and the commercial in academic identity and practice

**Martha Caddell<sup>1</sup>, Susanne Schulz<sup>2</sup>**

<sup>1</sup>Heriot-Watt University, Scotland; <sup>2</sup>Queen Margaret University, Scotland

*This paper explores the perceived tension between creative and commercial demands on university staff through an exploration of the situated experience of academics, their pathway into academic work and their (changing) perceptions of success. The discussion steps outside the higher education sector to explore the parallels with the creative industries, a sector which must balance similar demands. In drawing on explorations of 'art worlds' (Becker 1982) and 'identity work' (Pratt, Rockmann and Kaufmann, 2006) we offer an alternative lens for understanding academic identities and for conceptualizing the creative work of universities. Viewing universities as 'art worlds' encourages a stepping back from any reification of the academic role to consider the bundles of tasks undertaken and the everyday negotiations between social actors. This lens also, however, leads to critical questions about what is valued in universities, how specific areas can be nurtured and how creativity that is less exchangeable can be showcased and preserved.*

### Examining the wellbeing and experience of graduate researchers: Why are so many distressed and what can universities do about it?

**Chi Baik**

University of Melbourne, Australia

The growing prevalence and severity of mental health difficulties across student populations is an issue of significant concern for universities. Not only does psychological distress impact an individual's health and daily life, elevated psychological distress also has detrimental effects on students' cognitive functioning and attention (Marin et al., 2011), and academic achievement (Stallman, 2010). It is therefore important for universities to monitor the prevalence of psychological distress among student populations and take a research-informed approach to enhancing student wellbeing and learning. This paper reports on a study examining the wellbeing and course experience of over 1,100 graduate researchers (mostly PhD) at a large research-intensive university in Australia. After an overview of findings on the prevalence of psychological distress (and positive wellbeing) among this cohort, I will identify key factors that, if improved by university policies and practices, could enhance PhD students' mental wellbeing while also increasing their course satisfaction.

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## Parallel Session 2.3: Paper

Location: WBH 04A22

Track 1: Learning, Teaching & Assessment

### How first year experience relates to university students' cognitive, social and value developments

**Maggie Y. Zhao<sup>1</sup>, Shuting Huo<sup>2</sup>**

<sup>1</sup>The University of Hong Kong, Hong Kong S.A.R. (China); <sup>2</sup>The Chinese University of Hong Kong, Hong Kong S.A.R. (China)

First year experience (FYE) is crucial for one's development during university studies. The present study aims to investigate the longitudinal prediction of students' perceived learning outcomes at the end of undergraduate study based on a variety of FYE variables including orientation, transition, goal setting, academic learning environment, residential experience, and campus activity participation. Furthermore, comparisons were made between local versus non-local students in terms of the predictive effect of the FYE variables.

### The link between 'learning', 'Feeling' and study-success in first-year professional bachelor students

**Gert Vanthournout, Lieke Luchten, Pieter Depessemier**

Artesis Plantijn University College, Belgium

This study explores the interrelations between students' motivation for enrolling in a teaching education program, their feelings of burnout and quality of learning at the end of the first semester, and two measures for study-success: students' commitment to the study program and Grade Point Average (GPA). Self-determination theory, learning patterns, Shaufeli's model of burnout and Tinto's model of student retention were used as theoretical frameworks. Students (N=210) filled in questionnaires

at the start and end of the semester. Data were analyzed using linear modelling and structural equation modeling. Results indicate that study-motivation affects both quality of learning and feeling of burnout, but that only the latter impacts on commitment. GPA on the other hand is solely affected by quality of learning. Results show the added value of combining multiple predictors and outcome variables. They demonstrate the merits of targeting both learning and feeling in the support of first year students.

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### **Parallel Session 2.4: Paper**

*Location:* WBH 04A14

*Track 3:* Curriculum Design

#### **Together we achieve more! A design for creating learning communities between research, education and professionals in the field**

**Joep Holten, Sjoukje Botman**

Amsterdam University of Applied Sciences, Netherlands, The

The Amsterdam University of Applied Sciences – world's oldest school for Social Work – will change their complete curriculum in September 2019. Based on the principles of High Impact Learning (Dochy & Segers, 2018), students, teachers and scholars will build towards a 21st century proof curriculum and on new epistemological approaches of scholarly commitment to social change.

Therefore we formulated a shared research agenda (The Sociale Agenda) based on values of social work. This agenda is based on a variety of data gathering methods (digital surveys, student projects, workshops). In total we got 162 respondents for our digital survey, besides several pilots and workshops with our current students. On several of our organized meetings 374 participants gave us their viewpoints. Based on positive responses we hope that the concept of Grand challenges stimulate focus in social work, amidst the current turbulence in society, policy and education.

#### **Zeppelin university's two-fold student research solution for undergraduate programs**

**Aynur Erdogan**

Zeppelin University, Germany

The two-fold student research focus of Zeppelin University at Lake Constance takes its cue from the Anglo-American tradition of undergraduate student research. The question that played part and parcel in the establishment of the student research at Zeppelin University was multi-faceted: How can a faculty or university, at best, focus on interdisciplinarity and provide flexible curricula as well as establish research-driven study programs. At the very heart was a proposition by the EHEA (European Higher Education Area) to "promote student-centered learning in higher education, characterized by innovative methods of teaching that involve students as active participants in their own learning" (European Higher Education Area 2012, 2).

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### **Parallel Session 2.5: Paper**

*Location:* WBH 04A18

*Track 6:* Scholarship of Teaching and Learning

#### **Evaluation of project-based learning in the Applied Psychology bachelor**

**Willemijn Mathilda Vermeer, Hanneke Goosen**

Amsterdam University of Applied Sciences, the Netherlands

The curriculum of the bachelor Applied Psychology (AP) of the Amsterdam University of Applied Sciences has been renewed. The new curriculum is built around key issues, dilemmas and activities within the AP profession, which means that project-based learning makes a significant part of the study program. Project-based learning intends to provide students with meaningful learning experiences by providing them with authentic real-world issues or questions that they have to address (Kokotsaki, Menzies, & Wiggins, 2016).

In light of the new curriculums Applied Psychology at the Amsterdam University of Applied Sciences of emphasis on meaningful learning experiences through providing students with authentic issues from external clients, we wanted to evaluate a project-based module with a particular interest in 1) how students, teachers, and external clients experienced the mutual cooperation, 2) the quality of the intervention plan and the level of the students competencies, and 3) the learning experience.

#### **Assessing the impact of technology enhanced learning on students with specific learning difficulties**

**Astrid Coxon<sup>1</sup>, Fabio R Arico<sup>2</sup>, Jeremy Schildt<sup>2</sup>**

<sup>1</sup>King's College London, United Kingdom; <sup>2</sup>University of East Anglia, United Kingdom

Higher education institutions (HEIs) are experiencing a radical uptake of technology enhanced learning (TEL) practices. There is a lack of robust research exploring how the changing landscape of HEI teaching impacts students, particularly students who have a specific learning difficulty (SpLD).

Individual, semi-structured interviews were conducted with nine HEI students with SpLDs. Interviews were analysed thematically.

All participants expressed that TEL wasn't always fully integrated or sensitive to students' learning needs. Some participants preferred traditional learning methods, finding TEL challenging to use. Others felt teaching staff used TEL in a way which was not appropriate to SpLD students, negatively impacting their learning experience.

This emphasises a need for ongoing, integrated teaching practice, utilising a broad range of teaching methods. Students in HEI are increasingly likely to be exposed to TEL. Findings from this research will enable the development of informed, evidence-based guidance for optimising integrated and inclusive teaching practices.



## **Parallel Session 3 | Monday 28/10 | 15:45 – 17:15**

### **Parallel Session 3.1: Symposium**

*Location:* KSH 00A11

*Track 1:* Learning, Teaching & Assessment

#### **Adapting Problem-based Learning (PBL) to bridge higher education and the labor market. Examples from Aalborg University**

*Chair(s):* **Antonia Beatrice Scholkmann** (Aalborg University, Department for Learning and Philosophy)

*Discussant(s):* **Sofie Loyens** (University College Roosevelt, Roosevelt Center for Excellence in Education (RCEE))

Providing higher education which is also relevant for a society and its labor market is one of the biggest challenges in the educational system of today (e. g. George, 2006; Gibbons, 1998; Teichler, 2015). This provision of relevant higher education calls for the implementation and use of instructional formats which hold the power to bridge research, teaching and practice in a feasible way (e. g. Gómez et al., 2007). Specifically, respective formats for that must provide both learning for the development of a scholarly mindset and for the acquisition of work-related generic and discipline-specific competences (e. g. Chu, Reynolds, Tavares, Notari, & Lee, 2017).

Aalborg University holds a long tradition of basing its teaching on the principles of Problem-based Learning (PBL, e. g. Kolomos, Fink, & Krogh, 2004). Parallely, the Danish higher education sector in general is focused on providing societally relevant learning outcomes (Vingaard Johansen et al., 2017), with in the last two decades establishing a close relation with stakeholders from the corporate world to ensure the relevance of candidates' competences for the labor market. At Aalborg University this shows as a dual relevance orientation throughout the study programs, with a specific, yet continuously evolving interpretation of Problem-based Learning that explicitly addresses the connection between scholarly learning and the use of the knowledge in concrete vocational fields.

The present symposium will present current examples of how PBL is used at Aalborg University to provide an education which addresses both the development of a scholarly mindset and the affordances of the (Danish) labor market. This comprises cross-faculty collaborations and an adaption of the traditionally semester-long PBL project work to fit with a more timely, short-term format (paper #1), the collaboration with a local company in early stages of a study program (paper #2) and the re-conceptualization of competence expectations towards PBL through the student perspective (paper #3). Together the three papers shed light on both instructional variations and new conceptions of intended outcomes of learning with the PBL approach in the light of a close relation between higher education and the societal affordances.

*Presentations of the Symposium*

#### **Short term PBL-events for intensive learning in HE**

**Kjeld Svidt<sup>1</sup>, Simon Christian Swanström Wyke<sup>1</sup>, Lone Krogh<sup>2</sup>, Annie Aarup Jensen<sup>2</sup>, Ole Ravn<sup>2</sup>**

<sup>1</sup>Aalborg University, Department of Civil Engineering, <sup>2</sup>Aalborg University, Department for Learning and Philosophy

In this part of the session we will analyze different practices of intensive short term PBL events from Aalborg University that relate to employability. First, we explore the 3-day PBL workshop called Digital Days in the field of Building Information Modeling. It is an annual event since 2010 that invites construction engineering students from different institutions and different study programs to participate in PBL group work on a particular building project. External partners are integrated in the project in different ways, and groups finalize digital plans for their proposed building within the three days for a final presentation. From interviews with students and external partners we discuss how the workshop functions as an employability platform where students meet the real-life issues of interdisciplinary teams in the construction business.

Finally, we discuss alternative models that focuses on students working across faculty borders or solution camp workshops hosted by a specific organisation.

#### **Let's get real! Bridging PBL project work and working life – a case study from Organizational Learning**

**Antonia Beatrice Scholkmann, Anja Overgaard Thomassen**

Aalborg University, Department for Learning and Philosophy

In the second part of the session a case study will be presented, which was undertaken following the merging of PBL activities and authentic case work with a regional company. The specifics of this project were that the confrontation with the authentic cases happened early on in the study program (i. e. in the second semester), with students being challenged to generate relevant answers to authentic questions of the company, based on relatively little previous knowledge.

The course was evaluated in a quantitative pre-post research design focusing on students' attitudes towards the learning experiences, as well as their self-perceived competence development throughout the course. Additionally, interviews with both students and representatives of the company were conducted.

In the session results from the mixed-methods analysis will be presented to shed light to the question, which factors facilitate successful learning in a format bridging PBL with challenges from a real work environment.

#### **A fresh glance: What students perceive they learn through PBL, and how this relates to normative and operative competence goals**

**Elisabeth Lauridsen Lolle, Antonia Beatrice Scholkmann**

Aalborg University, Department for Learning and Philosophy

In the third part of the session the authors will present the results from an in-depth, multi-source qualitative study with students from various programs at Aalborg University. Participants over one semester reflected on their perceived competences and developments, using multiple tools such as digital portfolio, mind maps and chats, and attended three face-to-face discussion workshops with the research team. All material gathered throughout this was analyzed in contrast to normative descriptions of the study programs, and also to existing evidence of students' competence acquisitions in PBL-curricula from quantitative

survey studies. First results show that students for one don't see PBL as the guiding principle for their competence acquisition but are steered by other (life-)events, and also that in the students' eyes learning is even stronger related towards labor-market affordances than the intended learning outcomes of the respective programs assumed.

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### **Parallel Session 3.2: Paper**

*Location:* WBH 04A10

*Track 1:* Learning, Teaching & Assessment

#### **Student engagement in intercultural group work**

**Irene Poort, Ellen Jansen, Adriaan Hofman**

University of Groningen, Netherlands, The

Intercultural group work (IGW) is considered a valuable learning strategy to prepare university students to effectively and meaningfully participate in a globalized world. However, students often refrain from truly engaging in IGW. To gain insight into factors that promote student engagement, a survey was conducted amongst 873 students from six universities in the Netherlands, Canada, and Sweden. Structural Equation Modelling analyses will be conducted to investigate the extent to which self-efficacy, and perceived costs and benefits of IGW contribute to student engagement in IGW. Having a better understanding of what motivates students to actively engage in IGW and what causes students to withdraw from engaging in IGW will aid teachers, curriculum designers and educational institutions in creating a learning environment in which cultural diversity can be used as a rich resource for learning.

#### **Exploring how professional bachelor students learn: combining online and offline measures**

**Gert Vanthournout<sup>1</sup>, Lieke Lochten<sup>1</sup>, Astrid Koelman<sup>1</sup>, Maja Christiaens<sup>1</sup>, Heidi Adriaensen<sup>1</sup>, Leen Catrysse<sup>2</sup>**

<sup>1</sup>Artesis Plantijn University College Antwerp, Belgium; <sup>2</sup>University of Antwerp

The current study explores diversity and quality in learning strategy use of students at the start of a professional bachelor degree, taking a mixed-method approach by combining self-report questionnaires and a think aloud study. The study has a two-step design. In a first step 62 students completed a questionnaire on their learning strategy use. Cluster analysis was used to identify learning profiles. Four such profiles emerged: 'Deep learning (high)', 'Deep learning (moderate)', 'Problematic regulation' and 'Reproductive learning'. In a second step eight students, pertaining to different learning profiles, participated in a think aloud study. Results show that students generally use few metacognitive strategies. They predominantly read and structure learning materials although the quality in the use of these strategies seems to differ according to their learning profile. This study complements insights from earlier research in a university context. It provides university colleges insights on more adequate support for students.

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### **Parallel Session 3.3: Paper**

*Location:* WBH 04A22

*Track 2:* Students & Staff

#### **How do academics experience the tensions between research and teaching in their induction to teaching across disciplinary workgroups?**

**Susan Mathieson**

Northumbria University, United Kingdom

This research uses Activity Theory to identify the tensions and contradictions experienced by academics between expectations around teaching and research during the probationary period. The research involved academics responsible for leading academic development across 6 departments, with the intention that their involvement in the research would contribute to changing induction practices in departments, as well as institutionally. The research generated terms and concepts for departmental activity systems for induction into teaching, which informed departmental vignettes for the induction of academics into teaching. Semi-structured interviews were then undertaken with newly appointed academics across these departments about their experiences. This paper focuses on the contradictions between teaching and research, which was a key theme that surfaced in the research. While all new academics struggled to mediate the tensions between research and teaching, induction practices varied significantly across disciplinary workgroups, which influenced the capacity of academics to become effective teachers.

#### **An exploration of how postgraduate research students who teach experience the research and teaching nexus at a UK university**

**Ruth Clayton Windscheffel**

City, University of London, United Kingdom

This paper explores how postgraduate research students who teach [PGRTs] in a UK 'commuter' university experience the research and teaching nexus. It is concerned with the formation of early career academics through the interactions of research supervision and practice with university teaching and pedagogical training. The study is a naturalistic, interpretivist inquiry that used a case-study approach and narrative interviewing to explore individual experiences within a particular social and cultural context. The researcher is an 'insider-researcher' at the same institution, ensuring part of the project's rationale was to explore the implications of PGRTs' experiences for the researcher's own teaching. It is anticipated that the study (which completes in

September) will offer insights into the current strength of localised, discipline-orientated academic cultures (Becher and Trowler, 2001) and the role of the 'hidden curriculum' in research supervision and training in UK Higher Education.

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### **Parallel Session 3.4: Paper**

*Location:* WBH 04A14

*Track 3:* Curriculum Design

#### **Between wish and reality: development of an inquiry stance in pre-service teacher education**

**Lidewij van Katwijk, Ellen Jansen, Klaas van Veen**

University of Groningen, Netherlands, The

The importance of teacher preparation and the attention to the role of pre-service teacher research in this is growing worldwide. Based on prior studies we identified four main aspects with regard to the development of the pre-service teachers' inquiry stance: 1. Research knowledge, 2. An inquiry habit of mind, 3. Research skills and 4. Application of research findings in practice. Previous research showed that pre-service teachers do not expect to conduct (practitioner) research in their future teaching job. The aim of this study is to gain insight into perceptions of pre-service teachers and teacher educators about the implementation of pre-service teacher research as well as suggestions for curriculum improvement. In this curriculum study, we combined a survey with panel interviews with teacher educators and pre-service teachers of eight universities of applied sciences. This study resulted in recommendations about how to develop an inquiry stance in teacher education.

#### **Using targeted curriculum redesign strategies for influencing baccalaureate nursing students' career choices**

**Margriet Van Iersel<sup>1</sup>, Corine Latour<sup>1</sup>, Rien De Vos<sup>2</sup>, Paul A Kirschner<sup>3</sup>, Wilma Scholte op Reimer<sup>1,2</sup>**

<sup>1</sup>Amsterdam University of Applied Sciences, Netherlands, The; <sup>2</sup>Amsterdam UMC; <sup>3</sup>Open University of the Netherlands

*Background* This research project studies whether a redesigned baccalaureate nursing curriculum in a University of Applied Sciences in the Netherlands can stimulate a positive interest for community care (CC) in students. Despite the extramuralisation of healthcare in many Western countries, most nursing students still orientate on the hospital for their career. Gaining in-depth knowledge on first-year students' perceptions and placement preferences can be helpful to positively influence students' perceptions of CC with targeted curriculum redesign strategies.

*Methods* A cross-sectional multicenter survey study ( $n = 1058$ ) using the Scale on COmmunity care PErceptions (SCOPE), and a focus group study ( $n = 16$ ) were conducted.

*Results and conclusions* Students underestimate the challenges of CC. They perceived it as a 'low-status-field' with many elderly patients and little care complexity. To remedy these misperceptions, recommendations for curriculum redesign strategies are formulated, stimulating a positive career outlook on the field of CC.

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### **Parallel Session 3.5: Paper**

*Location:* WBH 04A18

*Track 1:* Learning, Teaching & Assessment

#### **The knowledge base of university teaching about research and practice: An exploratory study in Child and Education Studies**

**Mayke Vereijken, Roeland Van der Rijst**

ICLON, Leiden University Graduate School of Teaching, Netherlands, The

Academics' decisions on subject matter and teaching approach in university teaching aim to foster student learning. Decisions are made based on academics' knowledge and beliefs about university teaching. This in-depth, small scale study aims to capture a knowledge base of teaching about research and practice in Child and Education Studies in order to promote quality in university teaching. In order to capture academics knowledge of teaching, semi-structured interviews were held with four academics after their lectures on the topic of research and practice. In addition, their teaching statements were gathered and analysed to elicit their orientations towards teaching in Child and Education Studies. The preliminary findings suggest that a knowledge base of teaching research and practice includes academics' knowledge of curriculum, instruction strategies and assessment. An additional analysis is in progress in order to develop representations of knowledge for individual academics. Implications of this study will inform academic development initiatives.

#### **Subject-matter didactics for software engineering in higher education - development and evaluation of didactical settings**

**Yvonne Sedelmaier, Dieter Landes**

University of Applied Sciences Coburg, Germany

So far, only few subject-matter didactics for higher education exist that are based on sound didactical principles. This paper presents details on how such a subject-matter didactics for a technical discipline, software engineering, has been developed over the last 8 years. This subject matter didactics takes a competence-oriented stance, and puts particular focus on non-technical competences and their linkage to technical competences. Furthermore, the approach comprises SECAT, an

assessment instrument for evaluating the effectiveness of learning settings. These results of our research have successfully been used in a Bachelor program in informatics and are currently adapted and transferred to higher education in related STEM disciplines.

## **Drinks and Poster Presentations | Monday 28/10 | 17:15 – 19:00**

Location: Catering area

### **Systematic and integrative review of psychosocial factors in academic achievement**

**Linda van Ooijen-van der Linden<sup>1</sup>, Susan F te Pas<sup>2</sup>, Liesbeth Woertman<sup>3</sup>, Maarten J van der Smagt<sup>4</sup>**

<sup>1</sup>Amsterdam University of Applied Sciences, Netherlands, The; <sup>2</sup>Utrecht University, Faculty of Social and Behavioural Sciences, Department of Psychology; <sup>3</sup>Utrecht University, Faculty of Social and Behavioural Sciences, Department of Psychology; <sup>4</sup>Utrecht University, Faculty of Social and Behavioural Sciences, Department of Psychology

Non-academic or non-cognitive factors could be valuable in selective university admission, supplementing prior academic achievement and cognitive admission tests as predictors of university academic achievement. We address the ill-defined character of this wide range of predictors of academic achievement and suggest defining them as psychosocial factors to better cover the content. A systematic and integrative review of both prospective studies and reviews and meta-analyses allowed answers to the questions what psychosocial factors predict academic achievement in tertiary education and how they can be constructively clustered. The proposed clusters are Personality, Motivation, Coping & self-regulatory skills, Creativity & curiosity, Communication, and Anxiety. These clusters are based on the relevant psychosocial factors as found in the empirical literature and as appeared congruent with their content and their role in academic achievement. Suggestions for programme-specific implementation of psychosocial factors in admission are given.

### **Supervising students' research ability in the practice-based undergraduate dissertation**

**Rianne Maaike van Lambalgen**

Utrecht University, Netherlands, The

In the past years, the importance of research ability in (undergraduate) students at Universities of Applied Sciences (UAS) in the Netherlands is stressed (Andriessen and Greve, 2014). The research presented in this poster shows how students at UAS apply research ability in the undergraduate dissertation and how dissertation supervision can contribute. Results from 7 interviews held with students at Media Entertainment Management, Inholland UAS indicate that students generally have a positive attitude towards applying research in their dissertation. Also, students acknowledge the importance of independence as part of their graduation project. Overall, students seem to be satisfied with their supervision, valuing the opportunity to engage in conversation with supervisors and the reassurance they get from their supervisor. This research shows that to facilitate the students' research ability, supervisors should encourage the student's independence, while at the same time provide assurance, structure and goal-related information.

### **Entrepreneurship for Society: developing a transdisciplinary minor program**

**Maarten Hogenstijn, Sharon Sprenger, Nesrien Abu Ghazaleh, Xandra Cremers, Hendrik Jan Trooster, Michelle Koomen**

Amsterdam University of Applied Sciences, Netherlands, The

'Entrepreneurship for Society' is a new minor program at Amsterdam UAS, the Netherlands. Using the concept of the 'Doughnut Economy' by Kate Raworth as theoretical baseline, focus is on social entrepreneurship (SE). The curriculum is designed to foster transdisciplinary collaboration between students and staff from different backgrounds, as well as with partners from the field of social entrepreneurship such as companies themselves, policy makers and citizen initiatives.

Apart from its content, the minor is innovative and experimental in three ways:

1. Connecting research and education: linking (development of) questions from the SE field to active involvement of students and teachers in the research Lab;
2. Transdisciplinary approach; using a problem-solving approach and collaborating with field partners
3. Interdepartmental organisation.

The minor will premiere in February 2020. We present our approach and the challenges we see, actively seeking feedback and links to scholars who have grappled with similar issues.

### **Scientific blogs assess a quantitatively different set of academic skills to that of more traditional assessments in Higher Education**

**Richard Harris, Jelena Havelka**

University of Leeds, United Kingdom

Recently there has been an increase use of scientific blogs as formative assessments in higher education. Whilst qualitative research has demonstrated that blog writing results in greater student engagement, creativity, and enjoyment (Hansen, 2015; Morris et al., 2019), little is known as to whether scientific blog writing assesses a quantitatively different set of skills compared to more traditional assessments. Here, we compared grades in a module in which students were tested using traditional assessments (coursework essay and MCQ exam), compared to grades in a module that adopted a scientific blog as coursework and an MCQ exam. We found a much higher correlation between grades on traditional assessments compared to when students were tested using a scientific blog and an MCQ exam. This suggests that scientific blog writing assesses a different set of skills compared to more traditional assessments, and highlights a necessity for greater diversification of assessments in Higher Education.

### **The knowledge, action and identity project. A research design to understand the transformation of students in higher professional education**

**Didi M.E. Griffioen, Indira Day, Jason Nak**

Amsterdam University of Applied Sciences, Netherlands, The

Students in higher professionals education are prepared for high level professional practice. To be able to fulfill their future roles, their educational programmes provide them interaction with professional knowledge, theoretical knowledge and professional practice. These types of interactions are presumed to aid students in their transformation from high school student to a professional in a complex society. However, it still is unknown how the different types of knowledge interact in the transformation of students to professionals through higher professional education, as well as the prerogatives for this interaction. This longitudinal study will follow 4x25 students of four different applied disciplines during their four years of undergraduate education to better understand this role of knowledge. In a mixed-methods design the interaction between the development of their professional identity, professional knowledge-base and notions of just professional action will be investigated. This poster presents an overview of the research design.

### **Bridging the gap between research and practice by means of Design Based Education**

**Corrie G.F. Sinia, Evelien H.E. Rij van, Anouk S. Donker**

NHL Stenden University of Applied Sciences, Netherlands, The

Empowering the development of research skills of students in vocationally oriented higher education programmes, can help to bridge the gap between research and practice. This poster addresses the question whether the new educational concept of NHL Stenden, Design Based Education (DBE), is suitable to do this.

Preliminary findings suggest that DBE fosters the development of the research skills of vocationally oriented students. Students seem to be more active and motivated because they are challenged to find solutions for real life problems. The iterative, Design Thinking based methodology seems to help students to develop their research skills and practical professional skills in an integrated way.

Still, challenges exist. Some fields are not used to design approaches. Sometimes it is difficult to combine the steps of DBE with a specific research method. Some teachers wonder how they can assess the quality of diverse projects and the knowledge and skills within these projects.

### **Use of research in teaching practice: implications for student' teachers training**

**Georgeta Ion, Ernest Lopez, Cecilia Suarez, Anna Diaz**

Universitat Autònoma de Barcelona, Spain

There is a general agreement that in the process of school improvement, the role of research evidence informing teachers' educational practices is fundamental. Research competences in the teacher education programmes are sometimes neglected or insufficiently promoted. The consequence is that teachers start their profession without a strong research basis acquired in initial training settings and this can difficult the engagement teachers have with research and its use to inform innovations in class.

The paper aims to analyse how teachers' training in research influence the engagement and use of research in the teaching practice in a sample of 437 teachers in Spain.

Findings suggest that academic research competences have a quite low impact on the teachers' choices of different sources of ideas for innovations in class and also influence moderately on their use of research in practice.

### **Student assessment of competencies of nurses-teaching associates in nursing care**

**Biljana Stojanović-Jovanović, Stevan Jovanović, Divna Kekuš**

Higher Education School of Professional Health Studies, Belgrade, Serbia

The aim is to present a student's assessment of the competencies of nurses – teaching associates in nursing education.

The research involved 150 students. An equal number of participants-respondents participated in 33.3% of students compared to the year of study (first, second and third year) at Higher Education School of Professional Health Studies. A standardized instrument "Nursing Clinical Teacher Effectiveness Inventory-a modified student version " was used.

Most respondents 92.7% belong to the age of 20 to 24 years, not employed 79.3%. The highest score was recorded with the item ". Demonstrates self confidence," while the lowest for the item "Does not criticize the student in front of others." Compared to the year of study, there is difference in the following scores: Professional competences, Relationship associate in teaching-student, and Relationship associate in teaching-patient / family-health team.

The competencies of associates in nursing education must be improved according to students' assessment

### **Strategic human resource management and the research-teaching-practice nexus: strategic personnel planning & professional diversity**

**Max Aangenendt, Yvonne Boender, Dorothee Colijn, Laura Lodewijk**

The Hague University of Applied Sciences, Netherlands, The

Balancing processes of external contingency and internal P-O fit is amongst the challenges facing innovative HE institutions today.

This multi-level case study presents findings from a research & development program targeted to investigate and improve organisational-, leadership- and employees' capacities to design, select and develop the human capital necessary to meet the strategic demands. The R&D project is framed as a collective organisational learning strategy with continuous alternation of research, design, pilots and implementation activities. Work in progress till 2020.

At present 25 strategic personnel plans are developed for degree programs and other organizational units, each of which is tailored to the strategic horizon and market of that specific organisational entity. Furthermore, instrumentation to run a strategic personnel planning process for knowledge institutions is developed transferable to other institutions. Finally, input is provided for the development of strategic HRM for career development & mobility, professionalisation, team development and resourcing strategy.

## **The linkages between evaluations and pedagogy: An exploration of higher education teachers' perceptions in Pakistan.**

**Malik Muhammad Wali Awan**

University of Management & Technology (UMT), Pakistan

The study was intended to understand the linkages between the classroom observation feedback and the pedagogical skills of teachers. The theoretical framework (Merç, 2015) delineates relationships of classroom observations with teacher's perceptions, sentiments, readiness for action and behavior. Qualitative thematic analysis was followed and in-depth interview design with semi-structured questions based on the theoretical framework were utilized for data collection purposes. Purposive sampling technique was applied to three higher education institutions in Lahore and nine faculty members were interviewed. Emergent themes showed classroom observations affect the teachers to a larger extent with respect to their perceptions, sentiments, readiness of action and behavior. Teacher's perceptions were found to be positive; however, the sentiments were mixed. The study contribute significantly in the development of the teacher evaluation procedures. The findings impact Pakistan's higher education at the policy level whereby universities must incorporate a fair and transparent criteria of evaluating teachers.

## **Using a multidimensional model of student engagement to facilitate and apply research on university teaching and learning**

**James E. Groccia**

Auburn University, United States of America

The concept of student engagement has played an increasingly significant role in efforts to understand and improve university student learning and persistence as well as overall institutional quality in the United States. I will present a multidimensional model (Groccia, 2018) that expands the definition and application of student engagement in higher education and discusses the increasingly important need for holistic engagement of today's university student. The impact of student engagement in learning, teaching and research as well as with faculty, community and other students is explored and suggestions are provided as to how the entire academic community can support these activities. Additionally, I will discuss how this theoretical model can be used to facilitate and ground research on teaching and learning and discuss current research findings on each element in the model.

## **Patternpool for practice and research**

**Ivo van den Berk**

Hochschule Emden/Leer, Germany

An essential challenge in Higher Education is to bridge the gap between teaching practice and empirical findings, theories and best practices. Relevant information for improving teaching and learning is still hard to find for university teachers. And even when they manage to find the information, it is often useless for them: too complex, not the information needed and/ or incomplete information.

These are the main reasons for setting up the Open Access Online Journal [www.patternpool.de](http://www.patternpool.de) within the project OPTion (funded by the German Federal Ministry of Education and Research). During the creation of the platform a number of challenges were identified, based on the fact that *Patternpool* strives to be both an adequate (and intuitively usable) instrument for the different types of authors as well as for different users cq. use cases.

We would like to present our development research-approach and discuss its potential for research and teaching practice with the conference participants.

## **Professional identity development as a perspective on learning: a grounded theory approach to create a theoretical model and practical propositions**

**Migchiel van Diggelen**

Open University of the Netherlands, Netherlands, The

The purpose of this study is to determine what a professional identity perspective on learning entails by integrating theoretical and practical perspectives on fostering students' professional identity development. For this purpose, a grounded theory approach was used. For the practical perspective, themes on professional identity development are derived from a qualitative study by analyzing student deliverables, observing and interviewing teachers and students involved in a blended learning line on students professional identity. For the theoretical perspective, we consulted and analyzed literature on students' professional identity, student-teachers professional identity, employability, personal development planning, career and citizenship and identity in developmental psychology. Synthesizing themes from both perspectives led to the development of a preliminary theoretical model consisting of several main categories and subcategories and propositions. The preliminary model and themes will be presented during the conference. The model and propositions might be of use for Higher Education programs intending to foster students' professional identity and provide relevant directions for research on (fostering) students professional identity development.

## Parallel Session 4 | Tuesday, 29/10 | 11:00 – 12:30

### Parallel Session 4.1: Symposium

Location: WBH 04A26

Track 4: Institutional Management & Leadership

#### Unraveling the complexities of major curriculum changes

Chair(s): **Debbie Jaarsma** (University Groningen)

Discussant(s): **Mirjam Oude Egbrink** (Maastricht University)

Higher education curriculum changes are difficult processes, in which the dynamics in the different schools are seriously challenged. Scholars in the field of health professions education emphasized the lack of research on these curriculum change processes. (1) Considerable time is spent on the content and pedagogical designs of curricula, neglecting the importance of the underlying organizational processes that will, ultimately, make or break great curriculum ideas.

Whitehead and colleagues (2013) use the metaphor of a 'carousel of ponies' to illustrate that the returning themes of curriculum changes/reform (CR) are like ponies circling around yet again on the curricular carousel in the continual rediscovery of discursive 'truths'. (2) One reason for this is a misalignment between the existing conceptualizations of curricula and CR, with the former generally perceived as "complex" yet the latter often approached as well-defined and linear, with clear steps to be taken. What seems to be missing is empirical evidence of what curriculum change looks like in practice, and the actual experiences of stakeholders involved in these processes. As curriculum changes are frequently recurring and resource intensive processes, it is in the interest of schools, staff and students that these processes are going as smooth as possible. Learning from previous processes might help support future processes. Therefore, this symposium aims to unravel the complexities of bringing about change in undergraduate curricula in the higher education domain.

We will address this topic from different stakeholder perspectives and at different levels; personal (the change leader), interpersonal (workplace teams) and organizational (governance processes). Different research studies with a variety of methodologies will be presented.

1. Bland, C.J., et al. (2000) *Academic Medicine*.
2. Whitehead, C. R., et al. (2013). *Advances in Health Sciences Education*.
3. Velthuis, F., et al. (2019) *Advances in Health Sciences Education*.
4. Decuyper S., et al. (2010) *Educational Research Review*.
5. Siciliano, M. D., et al. (2017). *Public Administration Review*.

*Presentations of the Symposium*

#### The art of balancing the hard and soft sides of governance in curriculum change processes.

**Floor Velthuis<sup>1</sup>, Hanke Dekker<sup>1</sup>, Remco Coppoolse<sup>2</sup>, Esther Helmich<sup>1</sup>, Debbie Jaarsma<sup>1</sup>**

<sup>1</sup>University Groningen, <sup>2</sup>University of Applied Sciences Utrecht

Translating curriculum change ideas to true changes in the curriculum is a major challenge (1). This study aimed to explore the role of governance in the process of translating the philosophies and educational concepts of a curriculum to real changes in practice. In three Dutch medical schools, 19 teachers who also hold an educational middle management position were individually interviewed, using the rich pictures method. Different governance processes were observed, each having its own effects and consequences on the actual curriculum and organizational responses. Acknowledging the role of governance in curriculum change processes is crucial. This study highlights the importance of paying more attention to governance in curriculum changes processes, at the critical translation level - from paper to people - in medical schools. To advance curriculum change processes and improve their desired outcomes it seems important to define and explicate both hard and soft governance processes.

#### "My right-hand man" versus "We barely make use of them": change leaders talking about educational scientists in curriculum change processes

**Hanke Dekker, Floor Velthuis, Esther Helmich, Tom Koole, Debbie Jaarsma**

University Groningen

Health professions education scholarship units are increasingly becoming a standard for medical schools worldwide, without having much information about their value and role in actual educational practices. In particular, the value and role of educational scientists, working in these units, is unknown. We conducted a Membership Categorization Analysis of interviews with leaders of medical curriculum changes to explore how they categorize educational scientists (use of category terms), and what they say about them (predicates). We noticed two ways of categorizing educational scientists, with observable different predicates. The study shows an ambiguous portrayal of educational scientists by leaders of major curriculum change processes.(3) Medical schools are challenged to establish medical curricula in consultation with a large, diverse and interdisciplinary stakeholder group. We suggest that it is important to invest in interpersonal relationships to strengthen the internal collaborations and make people are aware of each other's existence and roles in curriculum development.

#### When teachers meet in interdisciplinary teams: hangouts, distribution centers and melting pots

**Stephanie Meeuwissen, Wim Gijsselaers, Ineke Wolfhagen, Mirjam Oude Egbrink**

Maastricht University

Major curriculum changes often impose new ways of working on teachers. Teachers' teaching experiences predominantly rely on offering course units strictly organized by distinct disciplines. However, preparing graduates for modern work settings often requires interdisciplinary teaching in integrated curriculum set-ups, with teachers from different disciplines collaborating. We explored interdisciplinary teacher team processes and outcomes using an exploratory, mixed-methods design. We conducted vignette-guided, semi-structured interviews with teachers offering different integrated courses at Maastricht University. Team



learning concepts (4) informed the interview guide and template analysis. Sequentially, course evaluation data were used to provide a descriptive analysis of students' perspectives on educational quality. We found three distinct team approaches: fragmented, framework-guided, and integrated. Courses that were developed by integrated teams showed on average highest evaluation scores. Our findings may inform faculty development programs on how to prepare teachers for taking up new roles in interdisciplinary teams and get most out of teamwork.

### Patterns of alignment in curriculum changes

**Remco Coppoolse, Josca Snoei**

University of Applied Sciences Utrecht

Educational innovations rarely lead to intended results as result of poor alignment between actors (5). This explorative study investigated underlying patterns that influence the process of an educational innovation. A learning history was made of an education innovation in a merger of three study programs in a university of applied science. A survey was followed by eight intimately involved actors interviewed by using the rich picture method. The survey and fragments from interviews were analyzed on themes and underlying patterns. The results were discussed with a panel of involved actors. The themes that were observed seemed to stem from three underlying patterns: 1) deep-rooted cognitive frames lead to isolation, 2) change positions determine perspective, 3) interpersonal mismatch undermines decision-making. This study emphasizes the importance of paying attention to the underlying actor perspective formed by cognitive frames, change positions and the influence of interaction on decision-making in an educational innovation.

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## Parallel Session 4.2: Symposium

Location: WBH 04A10

Track 1: Learning, Teaching & Assessment

### Conceptualising, measuring and developing student teachers' competences: Innovative practical approaches

Chair(s): **Ruben Vanderlinde** (Ghent University)

Discussant(s): **Natalie Pareja Roblin** (Amsterdam University of Applied Sciences)

Competence-based education has gained popularity during the past decades, in higher education in general and teacher education in particular. This implies that specific emphasis is placed on educating competent professionals who can successfully apply their knowledge, skills and attitudes in complex professional settings.

Despite this increasing attention for competence-based higher education, more research is needed in the field of teacher education around the (1) conceptualisation, (2) measurement, and (3) development of student teachers' competences regarding complex teaching practices. This symposium aims to provide more clarity and increase our understanding about these topics. All papers are situated in teacher education but are relevant for other disciplines in higher education.

This symposium comprises a *theoretical introduction* and *three coherent research presentations* on student teachers' competence development. Attention will be paid to the results of the various studies, as well as to possible implications for higher education policy and practice.

- The *theoretical introduction* elaborates on Blömeke et al.'s (2015) recent conceptual model on teacher competences (Figure 1). This model conceptualises teacher competences as a continuum, starting for affective-motivational and cognitive dispositions (knowledge, motivation), over situation-specific skills (perception, interpretation and decision-making), leading to performance in terms of observable behaviour. Specific attention is paid to the importance of the processes that connect dispositions on the one hand, and performance on the other hand. In this respect, the use of video material for measuring and developing complex teacher competences in the context of teacher education is framed theoretically and empirically (Kaiser et al., 2015).
- The *first research presentation* focuses on the conceptualisation and design of student teachers' aggression management competences. Student teachers' reflections on their situation specific skills (Blömeke et al., 2015) in relation to an online clinical simulation experience are highlighted.
- The *second research presentation* focuses on the conceptualisation, measurement and development of student teachers' inclusive teaching competences by building on Blömeke et al.'s (2015) competence model and by using videography.
- The *third research presentation* focuses on the conceptualisation, measurement, and development of student teachers' parent-teacher communication competences by building on Blömeke et al.'s (2015) competence model and by using clinical simulations.

Overall, the symposium focuses on the conceptualisation, measurement, and development of complex teacher competences by means of innovative methodologies and instructional approaches, like videography and clinical simulations in the context of teacher education. The connection between theory and practice is consistently emphasized. Accordingly, the symposium fits with the theme of the conference.

*Presentations of the Symposium*

### Dealing with aggression in the classroom: Design of a competence model

**Delphine Franco, Martin Valcke**

Ghent University

Aggressive behaviour in a classroom has a major impact on the learning environment, including on students' and teachers' well-being (Oliver & Reschly, 2007). Responding appropriately to this behaviour is therefore crucial. However, novice teachers often report feeling ill-prepared to handle an aggressive incident due to lack of behavioural repertoire and inadequate

cognitions (Allen & Wright, 2014). This presentation focusses on the design of an aggression management competence (AMC) model reflecting both strategies and attitudes to deal with students' aggressive behaviour. After presenting the model, the contribution of clinical simulations to the development of this model will be outlined. The role of perception, interpretation and decision making reflections (Blömeke et al., 2015) of student teachers in relation to these simulations will be highlighted. Furthermore, the results of a pilot study regarding AMC-mastery of student teachers will be presented and discussed.

### **Unravelling student teachers' inclusive teaching competence through videography**

**Karolien Keppens, Ruben Vanderlinde**

Ghent University

The growing diversity in pupil populations poses challenges to the professional development of student teachers. Educating student teachers for teaching in highly diverse classrooms has become one of the central responsibilities of teacher education programs. However, student teachers are rather poorly prepared for the teaching profession as facilitators of inclusion (McDonald, 2005). This presentation focuses on the measurement and development of student teachers' inclusive teaching competence by building on Blömeke et al.'s (2015) competence model and by using videography. A video-based assessment instrument (Author, 2019) will be presented to measure student teachers' inclusive teaching competence. Next, a video-based training program will be presented to foster student teachers' competence development regarding inclusive teaching. The video-based training program builds on three different video-embedded learning activities, being video fragments of others' teaching, video recordings of students' own teaching and movie scenes.

### **Conceptualising, measuring and developing student teachers' parent-teacher communication competences**

**Karen De Coninck, Ruben Vanderlinde**

Ghent University

Parent-teacher communication is a core practice of family-school partnerships for which student teachers must develop competences during teacher education. However, research points at related shortcomings resulting in a gap between teacher education and teacher practice (Willems et al., 2018). This presentation focuses on how teacher education institutes can cope with these challenges by building on Blömeke et al.'s (2015) competence model. First, a conceptual framework describing the specific competences required for parent-teacher communication — i.e. Parent-Teacher Communication Competences (PTCC) — is presented. Next, a video-based instrument focusing on the measurement of PTCC-related situation-specific skills is presented as a means to gain insight into this competence (Author, 2018). Finally, two evidence-based education programmes targeting the development of student teachers' PTCC are discussed: (1) a programme building on online clinical simulations, and (2) a programme building on face-to-face clinical simulations.

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## **Parallel Session 4.3: Paper**

*Location:* WBH 04A22

*Track 2:* Students & Staff

### **Experiencing the research-teaching nexus in relation to teaching experience and amount of pedagogical training**

**Mari Murtonen<sup>1</sup>, Henna Vilppu<sup>2</sup>**

<sup>1</sup>University of Tampere, Finland; <sup>2</sup>University of Turku, Finland

The aim of this study was to explore whether the length of teaching experience and amount of pedagogical training have an effect on teachers' experiences of the research-teaching nexus. First, a qualitative study (Study A) was conducted to find how the teachers experience the research-teaching nexus. Then, a larger sample was collected to measure the numerical differences (Study B). Both teaching experience (measured in teaching years) and pedagogical training (measured in credit points) were found to be connected to experiencing research-teaching nexus. The most experienced and pedagogically trained teachers thought that research and teaching supported each other while the novice teachers thought more often that teaching interfered research.

### **Science undergraduate student attitudes towards research in a research intensive institution: Gender, language, study year differences.**

**Colin Montpetit, Rhyanna Melanson**

University of Ottawa, Canada

At the core of their mission, undergraduate programs at research intensive higher education institutions aim to recruit students into research careers and/or graduate education to develop their understanding of the nature and practice of science and foster academic and professional development of those who will not continue to work in academia following graduation (Labov et al., 2010). Given the objectives of promoting scientific research, great value in developing curricula and programs that engage student in research activities to cultivate an awareness of research findings and to train students for employment requiring research skills are among ongoing efforts by science faculties and departments. In order to test the claim that research-integration pedagogies and student inclusion in research activities impact their attitudes towards research, the study described the relationships between student intention to use their research competencies in their future careers and their perceptions of and attitudes towards research.

### **Fostering the scientific workforce: the effect of undergraduate students' motivation for research on actual research involvement**

**Belinda Ommering, Floris van Blankenstein, Friedo Dekker**

Leiden University Medical Center, The Netherlands

Research is key for development. Certain domains, like medicine, face a shortage of researchers. Higher education could develop researchers by stimulating student engagement in research. Consequently, studies examine motivation for research as a key parameter of success. This study aims to examine the effect of motivation for research on actual research involvement.

We surveyed first-year medical students at the start of medical training. Students were followed during their bachelor's program to identify research involvement during their second year. Logistic regression analyses were used to examine influences of motivation on involvement in research.

315 out of 316 students participated. Intrinsically motivated students were more often involved in research (OR=3.4;95%CI=2.07-5.58). This effect remained after adjusting for gender, age, pre-university activities, self-efficacy, perceptions, and curiosity (OR=2.5;95%CI=1.34-4.76).

Intrinsic motivation increases the odds of research involvement substantially. Therefore, intrinsically motivating students for research could indeed be seen as a first step towards success.

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**Parallel Session 4.4: Paper**

*Location:* WBH 04A14

*Track 1:* Learning, Teaching & Assessment

**Lecturers in higher education as curators of crossmedia resources: a scoping literature review**

**Rose H. Leighton<sup>1</sup>, Didi M.E. Griffioen<sup>1</sup>, Ron J. Oostdam<sup>1,2</sup>**

<sup>1</sup>Hogeschool van Amsterdam, Netherlands, The; <sup>2</sup>Universiteit van Amsterdam, Netherlands, The

In today's era of content abundance, lecturers in higher education have an endless supply of crossmedia materials they can present to students as learning materials. This confronts lecturers with the challenge to select those materials in such a way that they match both course topics and proficiency levels of students. Additionally, they need to consider how to structure resources and make connections between them in order to support students' learning. It is often recognized that this task is remarkably similar to the task of curators in museums.

This paper aims to provide an overview of research regarding 'lecturers as curators' in the context of higher education. Seventeen articles that focus on curation of learning materials by lecturers were identified and analysed. Although most articles recognize the notion of curation as a useful approach, they fail to describe overarching processes or criteria for successful curation of learning materials.

**Opening the door on supervision: how academics manage the different elements of master's project supervision**

**Ann Macfadyen**

Northumbria University, United Kingdom

Undertaking a master's level dissertation can be a challenging experience. Guidance from an interested, supportive academic is invaluable and the supervisor is acknowledged as a key role, at the nexus of teaching and research. Preparation for this responsibility is variable and there is relatively little research into master's level supervision.

This presentation will report on a collaborative project which involved 25 master's dissertation supervisors who identified that it is one of the aspects of the job that academics feel least prepared for and worry about. Through sharing their experiences, and reflecting together on the nature of supervision, the complexities involved in this role were articulated, and a three sided model, which conceptualises the process of supervision and explains the way supervisors practice, was developed. Building on their assessment of a student's readiness, motivation and individual situation, they balance three functions in promoting student growth: Facilitating, Nurturing and Maintaining Standards.

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**Parallel Session 4.5: Paper**

*Location:* WBH 04A18

*Track 1:* Learning, Teaching & Assessment

**Defining cutting-edge issues in the nexus between internationalization of teaching and learning, institutional change, and faculty development: Future research suggestions**

**James E. Groccia, Andrew R. Gillespie**

Auburn University, United States of America

Working together as part of the Global Teaching Academy, our faculty have discovered commonalities in both opportunities and challenges in pedagogy across disciplines and geography. In exploring these commonalities and opportunities, Auburn's Global Teaching Academy faculty instituted a project to synthesize and to collaborate on these ideas with other like-minded colleagues around the globe. In this presentation, we will share the goals, development process, program content, and outcomes of an innovative strategy in promoting global learning conducted in June 2018: The International Perspectives on University Teaching and Learning Symposium (IPUTL). IPUTL was a three-day meeting exploring new and innovative avenues of global teaching and learning informed by theory, research, and practice, as well as current and future trends and issues

impacting international undergraduate and graduate education. Suggestions for future research on the nexus between international teaching and faculty development will be shared.

### **Knowledge production on higher education studies: a decolonial contribution from Latin America**

**Carolina Guzmán-Valenzuela**

University of Chile, Chile

In this paper, an overview of higher education research in Latin America is offered. Drawing on literatures on higher education studies (Khem, 2015; Tight 2015, 2013, 2012; MacFarlane & Grant, 2012; Teichler, 2005, 2000) and through an empirical study that analysed papers by Latin-American authors between 2000 and 2015 in the Web of Science core collection and the SciELO collection, this paper aims to examine the main trends in higher education research in the region as well as to discuss the main challenges ahead. In so doing, this paper critically examines the knowledge production in higher education studies from a critical perspective that draws on the concept of ayssal thinking (Santos, 2014). Finally, the paper discusses some challenges so as to make more 'visible' the knowledge on higher education produced in the Latin American region. (This research is funded by FONDECYT 1170374).

## **Parallel Session 5 | Tuesday 29/10 | 13:30 – 15:00**

### **Parallel Session 5.1: Symposium**

*Location:* MLH 01A30

*Track 1:* Learning, Teaching & Assessment

#### **Developing research competence for professional contexts in higher professional education**

*Chair(s):* **Lisette Munneke** (HU Utrecht University of Applied Sciences)

*Discussant(s):* **Miriam Losse** (Saxion University of Applied Sciences)

Throughout Europe, we have witnessed a rapid change in professional practice due to the transition towards a knowledge society (De Weert & Soo, 2009). Contemporary work demands professionals who can create and test new, applicable knowledge (De Weert & Leijnse, 2010; Markauskaite & Goodyear, 2017; Nerland & Jensen, 2014). Therefore, higher professional education (HPE) has to prepare graduates for a multitude of multidisciplinary occupations in complicated and complex contexts.

These developments were reflected in the Bologna declaration, which stated that all higher education in European countries should conform to the same bachelor and master levels (European Ministers of Education, 1999). In the Netherlands this led to the development of practice-based research at the universities of applied sciences (UASs) in addition to professional training. Since 2001 research groups have been introduced at Dutch UASs (De Weert & Soo, 2009) to develop the knowledge necessary for solving issues deriving from professional practice in close collaboration with practice (De Weert & Leijnse, 2010). Simultaneously, the growing significance of developing students' research skills was realized (Barnett, 2004; Brew & Mantai, 2017; Griffioen, 2013) and UASs have been required to train students as young professionals with research competence (Andriessen, 2014; Heggen, Karseth, & Kyvik, 2010). As a result, professional programs have integrated research skills in their curriculum, for example in the graduation project (Losse & Nahuis, 2017; Verburgh & Elen, 2013). Because professional bachelor and master programs aim at theoretical and practical training with a professional orientation, gaining research competence should not be an aim in itself, but should lead to professionals who can do research closely tied to their professional contexts and development of professional products (Andriessen & Greve, 2013; Losse & Nahuis, 2016). However, there is still a lot of confusion about the specific nature of research competence in professional contexts compared to research competences of professional researchers. This results in ambiguity about how to integrate research competence into the curriculum of programs with a professional orientation and the appropriate didactic approaches. In this symposium we want to address these issues by presenting research into: 1) the specific nature of research competence in specific professional contexts and 2) associated assessment criteria for students in HPE during their graduation project, 3) an overview of the different ways professional programs have integrated research competence in curricula and 4) a didactic approach helping students to handle uncertainty they encounter when doing research in a professional context.

*Presentations of the Symposium*

#### **Pragmatic research tactics for novice IT engineers**

**Dan Greve, Koen van Turnhout**

HU Utrecht University of Applied Sciences

IT engineers have to learn to close knowledge gaps that arise during projects. These knowledge gaps can be closed through inquiry, but can also require rigorous research. Since professionals work under constraints, they face trade-offs between quality, risk and efficiency. This means IT engineers use pragmatic research tactics that aim for the highest chance to find sufficient answers. Literature supplies solid strategies for research in projects as a whole, but hardly supplies flexible tactics within a project. In this research we tried to find out which pragmatic research tactics starting IT engineers use in their daily practice. Eleven semi-structured interviews were conducted among IT engineers with three to five years' experience and analysed by two researchers using selective and axial coding. The study reveals three types of knowledge gaps: non-critical demand, critical demand & change the game, and three pragmatic tactics to close gaps: concentric, incremental & probe-response.

#### **Usability first - building a bridge between rigor and relevance in HPE graduation projects**

**Pieter Schilder, Lisette Munneke**

HU Utrecht University of Applied Sciences

Many HPE-programs express uncertainty about the required level of methodological rigor of research in graduation projects in a professional context. Simultaneously, they are concerned about the relevance for commissioning clients. This creates tension between rigor and relevance. In the specific context of business management we investigated the question what level of usability is required and what this means for rigor and relevance. Both lecturers in business management and professional managers were interviewed. The interviews were analyzed by two researchers using selective and axial coding. Results confirmed the tension between relevance and rigor, however both lecturers and managers couldn't specify a minimum level of relevance and rigor. Specifically managers expressed that relevance and rigor should be determined by considering several factors specific for the professional context. This seems to be the core ability for HPE-students in applying research in professional contexts. We argue this should be incorporated in professional programs.

#### **A closer look to research competence in professional contexts: exploration of different ways HPE integrates research into teaching professional competencies**

**Alma Mustafic, Lisette Munneke**

HU Utrecht University of Applied Sciences

Recent years have seen many Dutch UASs integrating research competence into their professional programs. However, there still is ambiguity about the function of research competence in specific professional contexts and a meaningful integration of research competence in a professional program. This research was aiming at getting an overview of the ways programs give meaning to research competence in professional practice and how this is integrated in the curricula. A multiple-casestudy was

conducted in which 23 professional programs of one UAS participated. Data gathered were documentation about research competency written by a program, supplemented with semi-structured interviews with key person. The data were qualitative analysed, using a mixed inductive and deductive approach. This resulted in three topics: views on the function of research supporting professional action, development of the reflective practitioner or innovation and change and the ways programs more or less integrate research competence in their curricula and graduation projects.

### **Tools for safe uncertainty: design principles for tools to handle uncertainty productively during practice-based research**

**Stijn Bollinger, Ritie van Rooijen**

HU Utrecht University of Applied Sciences

In the growing complexity of today's world, uncertainty is a common experience of professionals which they have to handle productively. This needs learning experiences in HPE to engage with uncertainty as a potential positive force in professional performance. Graduation projects in Dutch' HPE-programs offer a learning environment which makes a strong appeal on students' abilities to handle unpredictability and ambiguity. Uncertainty can become productive when enough safety is experienced. This can be reached by deploying educational tools that help students to make sense of their uncertainty. In this contribution, the results are presented of a systematic evaluation of six sense-making tools of 'safe uncertainty' by means of a serial multiple-case study. Analysis were conducted qualitative in an inductive way with the CIMO-logic as coding-scheme. This resulted in eight design principles to create tools that scaffold students to handle uncertainty productively by means of sensemaking.

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## **Parallel Session 5.2: Symposium**

*Location:* MLH 01A40

*Track 1:* Learning, Teaching & Assessment

### **Translating quality culture theory to (best) practice; multi-stakeholder perspectives as stepping-stone for organisational development**

*Chair(s):* **Gea van Zutven** (Fontys University of Applied Sciences)

*Discussant(s):* **Diana Dolmans** (Maastricht University)

#### **Abstract**

Hitherto, action-based research and multiple-case studies on quality culture development approaches in higher education institutions are scarce. This lacuna can be bridged by identifying and sharing best practices across institutions, therewith aiding actors involved in educational quality development to foster a quality culture tailored to their specific context. In this interactive symposium, participants are challenged to translate quality culture theory into practice. The symposium explicitly builds on varying experiences in teaching and learning, differences in perceived organisational cultures and engagement in educational quality enhancement practices of the HEC attendants. A series of individual, small group and plenary exercises will be performed, addressing: a) quality culture characteristics, b) the gap between current and preferred organisational practices for quality culture development, c) sharing best practices to overcome the gap identified in the previous step. Three research papers are used to introduce theoretical concepts, to elaborate on empirically validated results, and provide recommendations to initiate a quality culture aimed at educational improvement.

#### **Objectives**

1. Increase participant's knowledge on theoretical quality culture concept and empirical research findings.
2. Translation of these insights into organisational development practices directed at continuous improvement of education.

#### **Target audience:**

Teaching staff members, policy makers and quality managers, students and educational researchers interested in quality culture development.

#### **Symposium outline**

N=maximum of 35 participants

##### **1) Introduction (20 min)**

- Theoretical introduction (abstract 1) on the quality culture concept, measurement instruments and empirical findings in Higher Education.

- Explanation of the aims and outline of the session

- Division of participants in small mixed groups (N=5).

##### **2) (group)Reflection on quality culture statements (20 min)**

- Read and reflect on statements concerning organisational culture orientations (abstract 2). Allocation of statements to either a "quality culture characteristic" or "non-quality culture characteristic" stack.

##### **3) Assess gap current and preferred practices in the own organisation, best practice exchange (20 min)**

- Progress with the selected quality culture characteristics. Score if the current situation in the own organisation is in line with the selected quality culture characteristics on a scale from 1 (a need for improvement) to 5 (best practice).

- Discuss the scores, paying specific attention to statements are scored as both a best practice and point of improvement by different group members.

#### 4) Presentation (30 min)

- Translation of theoretical and empirical findings into practical approaches for quality culture development (abstract 2, 3).

#### *Presentations of the Symposium*

##### **Quality culture in higher education: from theory to practice**

**Dries Berings<sup>1</sup>, Zjef Beerten<sup>2</sup>, Veerle Hulpiau<sup>1</sup>, Piet Verhesschen<sup>1</sup>**

<sup>1</sup>KU Leuven, <sup>2</sup>KHLIM

Purpose: To unravel how care for quality is sustained by quality assurance systems on the one hand and institutional organizational value orientations on the other.

Method: Two case studies were conducted; one of a university and one of a university college. These studies elaborate on the congruence between system and cultural features of care for quality, and educational and organisational objectives versus corresponding performance criteria.

Results: The gap between current and preferred value orientations is the largest for 'collectiveness'. Yet, successful care for quality depends on a balance of this orientation with individual specialisation, performance and competition as well as a 'systems' orientation.

Conclusion: A dialectical approach to quality culture is fruitful when it is based on a robust conceptual framework complemented by an assessment and reflection tool. Open debates form a starting point to a better fit between culture and systems in place to reach educational and organisational goals.

##### **Shaping a culture for continuous quality improvement in undergraduate medical education**

**Guy Bendermacher<sup>1</sup>, Wilem de Grave<sup>2</sup>, Ineke Wolfhagen<sup>2</sup>, Diana Dolmans<sup>2</sup>, Mirjam oude Egbrink<sup>2</sup>**

<sup>1</sup>Maastricht University (UM), <sup>2</sup>UM

Purpose: To identify key features of an organizational quality culture and explore how these features contribute to continuous improvement of undergraduate medical education.

Method: the authors conducted a multi-center focus group study among six education advisory committees. Participants were 22 faculty and 18 student representatives affiliated to Dutch medical schools. The group interviews focused on quality culture characteristics in relation to optimising educational development, implementation, evaluation and improvement. Template analysis was applied to analyse the data.

Results: Five themes resembling quality culture constituents to continuous improvement were identified: 1) fostering an open systems perspective, 2) involving stakeholders in educational (re)design, 3) valuing teaching and learning, 4) navigating between ownership and accountability, and 5) building on integrative leadership.

Conclusions: In addition to quality management systems and structures, faculty's professional autonomy, collaboration with peers and students, and the valuing of teaching and learning need to be amplified.

##### **Exploring the supporting potential of two reflection instruments to concretise a vision and strategy on quality culture development**

**Dries Berings<sup>1</sup>, Gea van Zutven<sup>2</sup>, Guy Bendermacher<sup>3</sup>**

<sup>1</sup>KU Leuven, <sup>2</sup>Fontys University of Applied Sciences, <sup>3</sup>UM

Purpose: Gain insight in the theoretical foundations, content and validity of two instruments to identify organisational quality culture and explore their potential to concretize a vision and strategy on quality culture development.

Method: At the 2018 European Quality Assurance Forum, 35 colleagues (policy advisors, educational researchers, teachers in higher education) joined an interactive 1,5 hour workshop in which they explored: 1) their implicit conceptualisation of quality culture, 2) the way this conceptualisation relates to an explicit statement on quality culture by the Dutch Education Council, 3) the potential of organisational culture assessment as a facilitator of reflection, dialogue, vision development and quality improvement.

Results: The process and results of this workshop indicate that reflection on organisational culture contributes to the clarification and realisation an organisation-specific quality culture.

Main conclusion: Current measures and approaches concerning quality culture lack involvement of all stakeholders, thereby hampering integral organisation development for continuous educational improvement.

#### **Parallel Session 5.3: Paper**

*Location:* WBH 04A10

*Mixed tracks*

##### **Rhetoric and reality in middle management: the role of heads of department in UK universities**

**Jane Creaton**

University of Portsmouth, United Kingdom

The role of the head of an academic department is central to the effective strategic and operational management of a university. Given the highly situated, relational and contingent nature of the role, it is important to focus on the specific departmental, disciplinary and institutional contexts in which heads operate. This paper explores middle leadership in higher education through the perspectives of twenty heads of department in a teaching focussed UK university. The findings indicate that most heads acquired their knowledge and understanding of leadership through the day to day experience of doing the job and their personal, departmental and disciplinary networks are more influential than formal institutional structures and

processes in supporting the role. There was considerable autonomy for individual heads to structure, manage and lead their departments, and as a consequence, the role is performed in significantly different ways across the institution.

### **Design principles for developing pedagogical provenance in a higher education landscape of increasing datafication**

**Keith Turvey<sup>1</sup>, Norbert Pachler<sup>2</sup>**

<sup>1</sup>University of Brighton, School of Education, United Kingdom; <sup>2</sup>University College London, Institute of Education

Against a backdrop of increased datafication in higher education, the aim of this paper is to highlight design principles that have the capacity to increase the pedagogical provenance of research into technology supported learning. We define pedagogical provenance as the potential to afford meaningful and ethical use within praxis. Centering pedagogical provenance as an analytical perspective in the design of research, we argue, has the capacity to sustain and inform practitioners' pedagogical judgements and professional development as they engage with the hermeneutics of integrating digital technologies into teaching and learning in higher education. We seek to illustrate how, too often, research into technology supported learning lacks the pedagogical provenance to render it usable or meaningful at a transformational level. Establishing principles for pedagogical provenance, we contend, will be vital in addressing the pedagogical, social and ethical challenges that the increased datafication of teaching and learning in higher education presents.

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### **Parallel Session 5.4: Paper**

*Location:* WBH 04A14

*Track 1:* Learning, Teaching & Assessment

### **Jump-start in Exercise Sciences: Constructive alignment saves the day**

**Waruna Weerasekera**

The University of Auckland, New Zealand

Student learning behaviour is varied and complex. A course that doesn't take into account existing knowledge and skills of students has very limited potential in making a positive impact on student capabilities. Realising intended learning outcomes of the course then becomes insurmountable. Such a course cannot be sustained and turns into a liability to the institute that conducts it. A multi-faceted approach with a strong focus on constructive alignment was used as a strategy to reverse a poorly performing undergraduate entry-level course in the multi-disciplinary field of exercise sciences. The intervention designed and delivered by the practitioner reversed summative evaluation metrics (course quality = 31% to 82% and then to 90%) and greatly improved student performance ('A'+ 'B' grades = 58% to 70%). The redesigned course transformed into a well-received flagship stage one exercise sciences course that continues to lay the foundations of the discipline to current and future undergraduate students.

### **Biomimicry: transformative learning for sustainable solutions**

**Mauro Gallo, Sandra van der Wielen**

AERES Hogeschool Wageningen, Netherlands, The

Biomimicry is an emerging discipline that aims at finding more sustainable solutions to human challenges through nature's emulation. Biomimicry is multi/interdisciplinary as it calls for the collaboration among diverse disciplines. Jargons, different perspectives and mindsets characterizing the various disciplines obstruct the knowledge sharing and the creation of new cultural forms during the bio-inspired design process. A methodology for the bio-inspired design, grounded on the theory underlying the boundary-crossing processes is proposed. The methodology will be tested in multidisciplinary class formed by universities of applied sciences students. The preliminary results will be discussed and eventual refinements to the proposed methodology will be illustrated.

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### **Parallel Session 5.5: Paper**

*Location:* WBH 04A18

*Track 4:* Institutional Management & Leadership

### **Vicarious learning as an educational strategy to learn from entrepreneurial failure**

**Ingrid Wakkee, Jeanne Martens, Juanfra Alvarado Valenzuela**

Amsterdam University of Applied Sciences, Netherlands, The

Embedding research in education is one of the key challenges for Dutch Institutes of Higher vocational education and studies on the outcomes of specific interventions are still relatively scarce. Our study seeks to make a contribution to this field by looking at how involving students in a research on entrepreneurial failure and recovery, through a plug in module embedded in a curriculum that is otherwise based on experiential learning affects their own entrepreneurial learning process. Specifically we sought to achieve three goals:

- Increase our research database of entrepreneurial failure stories by tapping into the networks, time and energy of students
- Introducing research and research methods (in casu qualitative interviews and reflections) into the entrepreneurship curriculum



- Enhance vicarious learning of the students in the field of failure and recovery by making them interview an experienced entrepreneur about this topic.

### **Transformations in social work pedagogy: analysis of immersive worlds and authentic learning.**

**Anne Llewellyn**

Teesside University, United Kingdom

This presentation will focus on a practical action research project that was conducted to explore the hypothesis that students can develop knowledge, skills and confidence for professional practice within an online simulated learning scenario. The research was carried out through the lens of cultural historical activity theory (CHAT) and explored the problems that traditional pedagogical practices are not preparing students effectively for social work practice in complex situations. The research concluded that simulated learning enables learners to negotiate meaning within an experiential learning process of an authentic case study.