

3-4 DECEMBER 2020

University West, Trollhättan

# ABSTRACTS





# Sessions VILÄR 2020

Mainroom (zoom): Links to main room and sessions can be found in the welcome letter, that has been sent to your email.



# December 3<sup>rd</sup>

	December 5				
	Track: WIL & Designs Zoom: Link in welcome letter Chair: Kristina Johansson	Track: WIL & Co- operation Zoom: Link in welcome letter Chair: Kristina Sandström	Track: WIL & Digitalization Zoom: Link in welcome letter Chair: Linnea Carlsson	Track: WIL & International experiences Zoom: Link in welcome letter Chair: Per Assmo	
Session I	KI. 15:00-15:45	Kl. 15:00-15:45	Kl. 15:00-15:45	KI. 15:00-15:45	
December 3	Handledares och den handleddes roller i lärarutbildningens verksamhetsförlagda delar (P)*_ Eva Taflin, Jörgen Dimenäs, Dalarna University	Artificial and Human Intelligence through Learning: How Industry Applications Need Human-in-the-loop (P)** Ulrika Lundh Snis, Andreas de Blanche, Kristina Eriksson, Monika Hattinger, Anna Karin Olsson, Linnéa Carlsson, Stanislav Belenki, University West	The challenge with the skilled hobbyist (P)**  Ulf Andersson, Mikael Andersson, University West	Development of the International Master's Programme in Work Integrated Political Studies (P)** Laurence Piper. UWC/University West International collaboration in the new WIL PhD programme at University West Per Assmo, University West	
Session II December 3	KI. 16:15-17:00	Kl. 16:15-17:00	Kl. 16:15-17:00	KI. 16:15-17:00	
	The student learning environment during a pandemic (P)** Josefa Vega Matuszczyk, Kristina Johansson, Martin Schuler, University West	Dialogseminarium – en prövad modell för att utveckla professionskunskaper, läraridentitet och skolutveckling genom flerpartssamtal under verksamhetsförlagd (P)*  Annette Mitiche, Tommy Gustafsson, Jörgen Dimenäs, Dalarna University	Tillgänglig lärmiljö i vardande: Professionellt lärande och kontinuerlig verksamhetsutveckling genom rollintegrering och digitalisering i förskolan (P)**  Maria Spante, University West; Kristina Brockner Strömstad kommun, Martin Dalenius, Strömstad kommun	WIL certification and quality assurance of the IPPE undergraduate programme at University West (P)**  Fredrik Sunnemark, University West Reflections of collaboration between student — university — society for research internship within the Master's programme for Work Integrated Political Studies (P)  Karl Dahlqvist, University West	
Session III December 3	Kl. 17:15-18:00	Kl. 17:15-18:00	Kl. 17:15-18:00	Kl. 17:15-18:00	
	Work integrated Learning trough other people's stories about their workplace-sociocultural perspective of WIL (P)**  Lennarth Bernhardsson, University West	Collaboration for lifelong-learning and contract education –towards a competence development model (P)**  Monika Hattinger, University West; Erica Byström, Linköping University; Åsa Bång, Mid Sweden University; Anna Jansson, University Gävle; Anders Johansson, KTH Royal Institute of Technology; Jan Novak, Linaues University	Content analysis on management discourse in digitalization: A work in progress discussion paper (I)* Linnéa Carlsson, University West	WIL as pedagogy to transform education (P)** Henri Jacobs, Central University of Technology, Free State Presentation of the Centre for Critical Development Studies, University of Toronto, Canada (P) Bettina von Lieres, University of Toronto	

# Sessions VILÄR 2020

Mainroom (zoom): Links to main room and sessions in Zoom can be found in the welcome letter, that has been sent to your email.

# December 4<sup>th</sup>

	Track: WIL & Designs Zoom: Link in welcome letter Chair: Kristina Johansson	Track: WIL & Co- operation Zoom: Link in welcome letter Chair: Kristina Sandström	Track: WIL & Digitalization Zoom: Link in welcome letter Chair: Linnea Carlsson
Session IV December 4	Kl. 10:30-11:00	Kl. 10:30-11:00	Kl. 10:30-11:00
	"AlL via IPL" — Arbetsintegrerat lärande genom införandet av interprofessionellt lärande i sjuksköterskeprogrammet på Högskolan Väst (P)*  Susanna Arveklev Höglund, Karin Rehnström, University West	Från vision till verklighet - ett försök med arbetsintegrerad lärarutbildning (P)* Susanne Antell, Jörgen Dimenäs, Annie-Maj Johansson, Lena Knies, Johanne Maad, Sofia Walter, University Dalarna	The challenges of using digital media for the work integrated learning (WIL) in the business studies after the sudden outbreak of the pandemic (P)**  Sabrina Luthfa, University West
Session V December 4	Kl. 11:15-11:45		Kl. 11:15-11:45
	Work-integrated second language learning (WIL2-learning) in different, formal and informal, domains (I)*  Linda Febring, University West		Application of work integrated learning in descriptions of practical implications: A study of dissertation work within Informatics with specialization in Work Integrated Learning (P)*  Camilla Gjellebæk, Victoria Johansson and Sarah Samuelson, University West

I= Interactive session (10 minutes presentation and 20 minutes Q&A)

**P**= Presentation (20 minutes presentation and 10 minutes Q&A)

\*= Presentation in Swedish

\*\*= Presentation in English

# **Keynotes**

#### **Professor Annalisa Sannino, Tampere University**

"Toward a power-sensitive conceptualization of transformative agency: *The role* of enhanced expansive learning tools of the Change Laboratory"

Recent findings on transformative agency by double stimulation (TADS) represent a contribution to ongoing discussions of agency and change in a cultural-historical perspective. Aspects of these discussions revolve around the notion of power. This keynote address presents a theoretical argument supported by an empirical example claiming that TADS is intrinsically a power-sensitive conceptualization of agency. The proposition constructed here complements Erik Olin Wright's perspective on the power of heterogeneous egalitarian coalitions for multi-layered collective action and transformation. Despite its dialectical and progressive stance, Wright's perspective is still predominantly one based on accounts and critiques on existing and prospective power dynamics. The proposition put forward here focuses on how hidden, unrecognized and often suppressed power is generated and how it can be supported by means of symbolic and material tools. A fourth generation activity theory study on eradicating homelessness in Finland is presented as an example. The study used enhanced expansive learning tools of the Change Laboratory conducted at the level of a supported housing unit for former homeless, at the city level and at the national level. The proposition of a power-sensitive concept of transformative agency builds on the following three claims 1) power can be put in motion by means of TADS; 2) conflicting motives are a resource for generating and exerting power; 3) power is a process similarly mediated as TADS.

#### Professor Roger Säljö, University of Gothenburg

"Human development in a designed world: Ecologies of knowing."

As humans we are the only species which is dependent on technologies in most of what we do. Through a long history of sociotechnical development, we have come to a situation where artefacts and technologies intervene in how we work, learn and live our lives more generally. We remember by using texts and databases, we access and process information by using a range of increasingly sophisticated devices and our perceptual capacities are supported by spectacles, binoculars and microscopes. We live in a designed world. An interesting question in this perspective is how to understand the development of human cognitive (and other) capacities as they evolve in response to such increasingly diverse and powerful external instruments supporting and co-determining physical, social and mental activities. Most of our knowledge about how people learn and develop emerged in socio-historical contexts where the line of division between the individual mind/body, on the one hand, and, on the other hand, the external world was relatively sharp. Today this line of division is blurred and most of what we know, we know through incorporation of technologies into the flow of our activities.

**Panel-debate** 

"Because I am a Girl": Gender Disparities in Wil Discourse(s)"

Speakers\*: Kristina Johansson, Maureen Drysdale, Tracey Bowen

Moderator: Kristina Sandström

Because I am a girl may be seen as a self-fulfilling prophesy about the lack of

opportunity, the segregation of girls and women in relation to some education sectors

like Science, Technology Engineering and Mathematics (STEM), and a broader,

more subverted social attitude towards gender and competency.

This debate and work shop will examine the contemporary rhetoric used in reference

to the education and work experiences of girls and women such as in STEM

recruitment campaigns - which can destabilize attempts to provide equal

opportunities for learning and career development.

\*Authors are listed in reverse alphabetical order to denote equal contributions.

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#### **Abstracts**

#### Camilla Gjellebæk, Victoria Johansson and Sarah Samuelson

"Application of work integrated learning in descriptions of practical implications: *A study of dissertation work within Informatics with specialization in Work Integrated Learning*"

Background: In 2002, the Swedish government assigned University West (UW) to develop work integrated learning (WIL). WIL is linked to learning in both organizational contexts and higher education. Research activities at UW are rooted in practice and expected to contribute to practice and societal impact and focus on "Learning in and for a New Working Life". Doctoral studies represents important premise suppliers for future research and contribution to the development of WIL, thus UW has provided doctoral programs with a specialization in work integrated learning since 2012.

This paper will explore how WIL and practical implications are described in dissertation work published between 2018-2019, within the doctoral program of Informatics with specialization in WIL (IWIL) at UW.

**Methods:** Seven dissertations within IWIL were analyzed based on questions related to descriptions of the practice domain and –perspective, relation between research(er) and practice, and the research's implications for practice. All analyses were discussed based on the intention of WIL as a basis of values.

Results: Dissertations were mainly based on engaged research approaches. Despite approach, the analyses revealed the collaborative processes to be scarcely described. Practice domain, problems and challenges are generally well displayed, but mainly representing the research perspective. Lessons learned, insights and reflections arising as part of collaborative processes are not pronounced clearly. Practical implications are often vague, difficult to identify, and presented from a research perspective operationalized as "principles" or recommendations. Added value and implemented changes are slightly discussed.

Conclusion: The dissertations meet the intention of contributing to "learning in a new working life". However, to be in line with WIL the research(er) need more focus on the practice perspective to provide "learning for a new working life". Different perspectives on practical implications, outcome of collaborative processes and final result should be more explicit in dissertations within doctoral programs within IWIL

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#### Annette Mitiche, Tommy Gustafsson, and Jörgen Dimenäs

"Dialogseminarium — en prövad modell för att utveckla professionskunskaper, läraridentitet och skolutveckling genom flerpartssamtal under verksamhetsförlagd lärarutbildning"

Under den verksamhetsförlagda utbildningen finns i lärarutbildningar ett antal olika tillfällen för lärarstudenterna att förutom mötet med eleverna, föra en dialog med andra parter som är involverade i lärarutbildningen. Det naturliga är de samtal som förs mellan lärarstudenten och handledaren men vanligt är också att en lärarutbildare från högskolan vid ett tillfälle också gör en observation och en bedömning av lärarstudenten, med efterföljande samtal med såväl handledare som lärarstudent under lärarstudentens verksamhetsförlagda del. Detta går i lärarutbildningar under olika namn som exempelvis trepartssamtal, dialogmöten eller praxisseminarier. I föreliggande studie utgörs fokus istället av ett utvidgat seminarium där även fler lärarstudenter, handledare, rektor och flera lärarutbildare från högskolan deltar och som benämns dialogseminarium. Syftet med föreliggande studie är att presentera och pröva en modell för ett utvidgat flerpartssamtal under den verksamhetsförlagda utbildningen. Grundtanken i denna utvidgade dialogseminariemodell är att samtal och frågor inriktas och får en karaktär av undersökande och problematiserande med utgångspunkt i lärarstudenternas val av frågor som lyfts under seminariet. I modellen väljs någon i studentgruppen till sekreterare för seminariet som skriftligt dokumenteras. Den huvudsakliga avgränsningen i samtalet utgörs av de mål som återfinns i VFU-kursens kursplan. Företrädesvis leder någon från högskolan samtalet. Samtalet ska också utmynna i några slutsatser som kan dras i relation till de mål som återfinns i kursplanen och återspeglar en forskningsintegrerad lärarutbildning.

Slutsatserna biläggs i ett dokument och publiceras genom studenternas försorg i en lärplattform. Detta dokument ska studenterna senare enligt modellen använda för att efter VFU-perioden skriftligt redogöra för en "handlingsplan" inför nästkommande VFU med möjligheter för den lärarstuderande att se sin egen utveckling över tid. Dialogseminariet i modellen är examinerande liksom den handlingsplan som studenterna lämnar vid senare tillfälle.

I föreliggande studie prövades denna utvidgade form av dialogseminarium där flera parter var involverade. Unikt för denna modell var att en partner- eller universitetsskola ansvarade för en grupp lärarstudenter på samma skola under deras verksamhetsförlagda utbildning och där alla lärarstudenter deltog i dialogseminariet. Vidare var målsättningen att alla VFU- handledare på skolan deltog liksom de lärare från högskolan som i denna dialogseminariemodell också var knutna till en specifik skola. Speciellt i denna modell var också att såväl lärare som representerar ämnesteori och didaktik på högskolan deltog. Vidare inbjöds rektor till dialogseminariet. Detta sätt att organisera ett dialogseminarium innebar att det fanns personer som representerade såväl forskning som en erfarenhetsbaserad kunskap i mötet med lärarstudenternas frågor kring läraryrkets många gånger komplexa frågeställningar. I dialogseminariet deltog samtliga dessa parter under ett ca två timmars samtal och antal personer under dialogseminariet kunde bli upptill 10 personer. Några slutsatser av den utvidgade dialogseminariemodellen är att den är krävande, kvalitetsdrivande och utvecklande för samtliga involverade parter och bidrar till en forskningsintegrerad lärarutbildning.

#### **Lennarth Bernhardsson**

"Work Integrated Learning through other people's stories about their workplace- sociocultural perspective of WIL."

A not uncommon view in higher education is that there is a clear difference between theoretical knowledge, what you learn at the university and the practical skills, what you learn in the workplace. Both forms of knowledge are considered important and why different activities in the area of Work Integrated Learning (WIL) are included in the teaching that aim to achieve the learning objectives that are in the syllabus. A relatively common form of examination of these goals is that students write a report on their workplace learning.

By conducting seminars or huddles where students are given the opportunity to learn from each other's experiences, such integration can be improved. Within the program "Digital Media", at University West, students have the opportunity to participate in a 20-week internship at a workplace with a focus on activities that they themselves want to work with in their future professional careers. Every other week, four thematic seminars was held based on the students' written stories about the workplace and a unique theme for each seminar.

Through summaries of the seminars, a questionnaire and a reflection report, the question was asked: How do students experience their learning based on classmates' narratives about their workplace?

We conducted 4 peer seminars, in order to talk about similarities and differences in the narratives, and a digital survey, Possibility to Learn at Workplace (PLW) consisted of two parts, one that focused on the workplace and another focused on the university's teaching activities. The students' final written report also dealt with reflections on the student's personal learning and development. These reports were treated through thematic content analysis.

The results show how learning is improved through socio-cultural activities in the form of the thematic seminars. The survey showed that the seminars were good support for creating new knowledge among the students.

#### Per Assmo

"International collaboration in the new WIL PhD programme at University West"

Work Integrated Learning (WIL) is a profile of University West, both in education and in research. Since 2020, the University has initiated a new and unique PhD programme in WIL. University West is given the task and responsibility by the Swedish government to develop WIL into a new research subject. Hence, University West is the only University that provide this PhD programme in WIL, nationally and internationally. The presentation initially provide a presentation of the PhD programme, discussing the field of research and the organisational structure. Being a unique PhD programme, University West aim to make it attractive in the international landscape of higher education and research. In so doing, the presentation discuss the development of international collaboration of WIL research, illustrated by a new agreement and collaboration of PhD education in WIL with Central University of Technology (CUT) in South Africa. In this respect, the presentation also highlight the opportunities of international long-term research cooperation in WIL, as a research field/subject, and thereto connected collaborations with the surrounding society at local, national and international levels.

# Susanne Antell, Jörgen Dimenäs, Annie-Maj Johansson, Lena Knies, Johanne Maad, and Sofia Walter

"Från vision till verklighet – ett försök med arbetsintegrerad lärarutbildning"

Den arbetsintegrerade lärarutbildning som är föremål för föreliggande studies fokus är ett resultat av ett samarbete mellan Högskolan Dalarna och regionens skolhuvudmän. Vid ett av de regelbundna mötena med Pedagogiskt Utvecklingscentrum vid Högskolan Dalarna fattades 2016 beslut att tillsätta en tankesmedja, i form av en arbetsgrupp med representanter för såväl skolhuvudmän som högskolan. Arbetsgruppen fick i uppdrag att ta fram olika förslag på åtgärder för att stärka lärarkompetensen både i kort och långt perspektiv i regionen från förskola till högskola. Det huvudsakliga motivet var att möta den akuta lärarbristen i regionen, men även bidra till lösningar för lärarbristen i landet som helhet. Parollen för arbetet var att samarbete, inte konkurrens, behövs för att möta och mota

lärarbristen. Vidare motiverades beslutet av att öka lärarutbildningens rekrytering av lärarstudenter med vissa inriktningar. Som en följd av tankesmedjans arbete startades höstterminen 2017 därför två varianter av arbetsintegrerade lärarutbildningar: Grundlärarutbildning inriktning 4-6 mot NO/teknik och Kompletterande pedagogisk utbildning med inriktning 7-9 och gymnasieskolan. Gemensamt för båda utbildningarna var att studierna skulle bedrivas på deltid (50-75% studietakt) och kombineras med anställning på en grund- eller gymnasieskola i regionen.

Ett annat motiv för en arbetsintegrerad lärarutbildning var att göra lärarutbildningen Man tänkte sig en "utbildning där teori och praktik blandas mer attraktiv. kontinuerligt genom hela utbildningen också ska kunna skapa goda, eller t.o.m. bättre förutsättningar för studenterna att uppnå utbildningens examensmål" (från Uppdragsbeskrivningen, 2016). Vidare avsåg man att utbildningen skulle vila på tidigare forskning om lärarutbildning som visar på betydelsen av att integrera klassrumspraktiken så att lärarstudenterna kunde erbjudas de bästa förutsättningarna för utveckla kunskaper för yrkesutövningen. Till skillnad lärarutbildningsprogram med periodvis verksamhetsförlagd utbildning, avsåg man att prova en form av lärarutbildning där skolverksamhet och högskoleverksamhet pågår under hela lärarstudentens studietid. Ett sådant upplägg tog också stöd i tidigare programutvärderingar och alumnundersökningar. En utbildning som tydligare varvar verksamhet och studier förväntades bättre förbereda studenter, minska risken för praxischock och istället utveckla kompetenser, förmågor och förhållningssätt för ett hållbart lärarskap. Projektet önskade dessutom undersöka möjligheten att attrahera nya grupper av studenter till lärarutbildningen Föreliggande studie grundas i data från utbildningsprogrammen när de två första åren genomförts.

Studien har till syfte belysa hur de arbetsintegrerade utbildningarnas attraktivitet i form av högre söktryck och möjligheten för huvudmännen i regionen att rekrytera och behålla lärare som kombinerar arbete med studier. Vidare syftar studien till att ge svar på frågan på vilket sätt de arbetsintegrerade utbildningarna stödjer lärarstudenters möjlighet till yrkesutövning. Studien ramas in mot en bakgrund av

nationella och internationella studier kring framgångsrik lärarutbildning och med en teoretisk ram bl.a. beskriven som situerat lärande. I studien har ett s.k. mixed-method perspektiv använts. Slutsatsen efter knappt två års pågående utbildningsprogram är att utbildningen utgör ett attraktivt sökalternativ och att den bedöms utgöra ett positivt rekryteringsunderlag av lärare för huvudmännen i regionen. Vidare indikerar resultatet att innehåll och struktur genom kommuners och högskolans samarbete ger möjlighet att utbilda skickliga lärare, delvis från en ny rekryteringsbas. Slutligen ger studiens resultat en insikt i vad som kan utgöra en vidare utveckling av de arbetsintegrerade programmen.

#### **Linda Febring**

"Work-integrated second language learning (WIL2-learning) in different, formal and informal, domains"

Work-integrated-learning (WIL) involves bridging between contexts of knowledge development, e.g., between everyday situations at work, and in working practices involving expert-novice relationships in school environments. Second language (L2) learning is different from other types of learning in that it takes place through usage of the target language (TL). In my licentiate-project I will investigate the Swedish language learning in different contexts, where formal learning in SFI classrooms is combined with workplace practice. The focus of this project is on the ways in which processes of language learning/acquisition in one context might be facilitated (or constrained) by process in the other.

#### My research questions are:

- 1. In what ways are the informal language learning of the workplace and formal learning of Swedish as a Second Language in school related?
- 2. What examples of boundary-crossing crossing can be found?
- 3. How can teachers' bridging practices be understood in the context of WIL?

To develop the research questions, and to carry out the analytical work, work on boundary crossing has been identified as having useful potential. Specifically, the conceptualization of school—work transitions, and the notion of boundary-crossing in vocational education by Akkerman and Bakker (2012) would appear to provide a useable framework for studying the ways in which, in work-integrated language education, the development of communicative skills in the classroom and the development of communicative skills in the workplace might complement one another in productive ways.

The study, which is currently work-in-progress, consists of interviews with teachers of Swedish for immigrants (sfi), vocational teachers, and workplace-based supervisors on work-integrated programs. Data has been collected at two different sites. An anticipated result is that it is hard to make connections between classroom-based and vocational elements. However, if opportunities for cooperation exist, outcomes may be successful.

#### References

Akkerman, S. F., & Bakker, A. (2012a). Crossing boundaries between school and work during apprenticeships. *Vocations and Learning*, 5, 153–173.

#### Eva Taflin and Jörgen Dimenäs

"Handledares och den handleddes roller i lärarutbildningens verksamhetsförlagda delar"

I föreliggande studie ska begreppet handledning förstås som handledarens och den handleddes tillskrivna roller i handledningssituationer under verksamhetsförlagd utbildning. I denna artikel relateras begreppet handledning också till begreppet roll. Ett sådant perspektiv antyds av Franke & Lindö (2005), när de exempelvis använder begreppsparet mästar-lärling, vilket de beskriver som ett asymmetriskt förhållande mellan en handledare och en lärarstudent. De menar att just detta begreppspar ska ses

som ett förmedlingsbaserat lärande där fokus ligger på hur kunskaper rörande läraryrket ska överföras från handledaren med yrkeserfarenhet till den mer oerfarne lärarstudenten. Med utgångspunkt i rollperspektivet kopplat till handledning och det nämnda begreppsparet menar vi för det första att det antyds en förväntan hos såväl handledare som den handledde att kunskap av något slag ska överföras från handledare till den handledde. För det andra kan det också ses utifrån sociala positioner där vi utifrån handledarens och den handleddes förmodade olika kunskap om professionen kan förstås som ett maktförhållande mellan handledare och den handledde. I denna studies analys av kontext kring handledningssituationer använder vi också begreppen förväntan och makt som analysenheter (Foucault 2002). I skenet av förväntningar och makt uppstår en relation av inflytande vilket innebär en slags förhandling i handledningssituationen mellan handledare och den handledde. I studien tar vi utgångspunkt för det första ett antagande om att det finns en förväntan hos såväl handledaren som den handledde under en handledningsperiod i yrket. För det andra finns ett ofta outtalat maktförhållande i och med att handledaren besitter en kunskap som den handledde inte har och för det tredje antar vi att det finns en förhandling om inflytande i spänningsfältet disciplinering och utforskande. Dessa tre antaganden utgör grunden för syftet med denna studie vilket uttrycks på följande sätt:

Syftet med studien är att identifiera olika perspektiv på handledningsroller hos skolverksamma handledare och lärarstuderande i relation till förväntan makt och inflytande.

Studiens empiriska underlag har inhämtats från intervjuer med 6 lärarstuderande vid tre olika tillfällen, där studenterna beskriver sin handledning och relation till handledare under sin VFU. Empirisk data härrör också från samtal med VFU-handledare. En tredje datainsamling bestod av examinerande uppgifter i en högskolekurs på 7,5 hp, en kurs för professionsutbildning för att verka som verksamhetsförlagd lärarutbildare. I denna kurs examinerades 20 studenter/handledare/lärare. En fjärde datainsamling bestod av en längre intervju med två erfarna verksamhetsförlagda lärarutbildare.

Ι sammanfattande resultatbilden olika presenteras perspektiv på i skolverksamma handledare handledningsrollen relationen mellan och lärarstuderande och är i första hand benämnda utifrån den handleddes perspektiv. Data har analyserats med fokus på hur lärarstudenten tilldelas eller tar sin roll i handledningssituationen utifrån förväntningar och inflytande. I det huvudsakliga resultatet har följande roller identifierats:

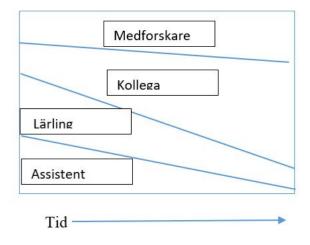
Underordnad styrning i handledningssituationer

- A. Assistent
- B. Lärling

Jämställd styrning i handledningssituationer

- C. Kollega
- D. Medforskare

Utifrån syftet med studien och efter en analys av det empiriska materialet går det att identifiera väsentliga aspekter på handledning av lärarstudenters verksamhetsförlagda utbildning. Dessa aspekter rör för det första identifikationen av fyra roller mellan handledare och den handledde där det hos båda kan antas finnas inslag av förväntan vilken också ligger inbäddad i en maktaspekt. För både den handledare och handledd innebär det också en fråga om inflytande under handledning under den verksamhetsförlagda utbildningen.



Figur. Modell för de fyra rollerna hos handledd och handledare under lärarutbildningens verksamhetsförlagda utifrån situation och tid.

En slutsats av studien är vikten av att som handledare och handledd se handledning ur olika aspekter. Vi vill understryka att det inte i studien är handledare eller den handledde som återfinns i de fyra rollerna utan det är just olika situationer under en verksamhetsförlagd utbildning som visar sig i fyra roller där handledare och handledd är involverade. Dessutom vill vi därigenom också använda en modell för tolkning som kan ses i ett tidsperspektiv där ett antagande att de fyra rollerna kan ha ett tidsperspektiv men de kan också bestämmas av den situation som råder i ett klassrum.

#### Referenser

Foucault, M. (2002). Sexualitetens historia. Band 1: Viljan att veta. Göteborg: Daidalos.

Franke, A. & Lindö, R. (2005). *Lärande handledningssamtal. En pilotstudie om handledning av svenskundervisning.* Göteborgs universitet: UFL-rapport 2005:01.

#### Kristina Brocker, Martin Dalenius, and Maria Spante

"Learning at work through role integration in language development and digitalization processes in preschool"

Various models and processes have been called for by the municipalities' Children and Education Committee to deal with a shortage of educated staff in the school system in a Swedish municipality. The first groups in focus were the preschool staff and the Adult Education's childcare education. Within the preschool, efforts have previously been made in language development and digitalization following curricula. However, differences in practice and competence between the preschools have been shown. A recent survey demonstrated that 90% of 113 staff respondents saw themselves as average users or less of the digital artifacts available and required, for example, surf tablets and software for age adequate multi-modal communication, and administrative systems and shared documents. In parallel, in adult education, the childcare programs' previous workplace learning (WPL) tasks functioned unsatisfactory since learning tasks and work practice has been disintegrated.

Therefore, it became essential to combine these activities and develop curricula driven models with viable forms and relevant content for both parties. The intervention study shows how specific roles in preschool began to cooperate within regular working hours and regular activities combined with future childcarers from adult education included in these activities with their internship-specific tasks in line with preschools' ongoing developmental work. At present, 20 language developers have participated in the development process. Furthermore, five digitalization managers at the 14 preschools in the municipality, together with 18 prospective childcarers and 18 supervisors from the municipality's adult education, have participated in the initiative with promising results. The integrated approach, with a specific focus on combining language development with the support of digitalization managers finding relevant software and tools based on enhanced competence among professional roles to judge between available resources and drive learning processes, seems to gain traction but needs further investigations to evaluate for sustainability.

#### Susanna Arveklev Höglund and Karin Rehnström

"AIL via IPL" — Arbetsintegrerat lärande genom införandet av interprofessionellt lärande i sjuksköterskeprogrammet på Högskolan Väst"

Kliniskt Lärande Centrum (KLC) på Högskolan Väst, institutionen för Hälsovetenskap präglas av ett personcentrerat, normmedvetet och hållbart synsätt på vårdande och erbjuder studenterna ett tryggt och säkert lärande. Vid KLC finns ett tydligt AIL-fokus när studenterna övar tekniska färdigheter samt mellanmänskliga förmågor, att omsätta sina teoretiska kunskaper till handling, innan de ställs inför autentiska möten med patienter och olika personalkategorier inom vården.

Samtida hälso- och sjukvård står inför nya utmaningar, som exempelvis ökad ojämlikhet, ökad andel äldre i samhället och ökad risk för pandemier, vilket för med sig komplexa vårdbehov. För att kunna möta dessa utmaningar krävs att högre utbildning utvecklas så att framtida personal inom hälso- och sjukvård förbereds för

att samarbeta över professionsgränserna. Förmågan att kunna samverka i team är ett av högskoleförordningens generella mål för blivande sjuksköterskor. Dessutom är samverkan i team en av sex kärnkompetenser som alla professioner i vården måste besitta för att kunna bedriva en god och säker vård. För att studenterna ska uppnå kompetens att i sin kommande yrkesroll kunna samverka i interprofessionella team, bör det redan under grundutbildningen ingå pedagogiska moment i form av Interprofessionellt lärande (IPL), där studenter från olika professioner inom Hälsooch sjukvården får möjlighet att lära om, med och av varandra.

Föreliggande projekt handlar om att implementera interprofessionella läraktiviteter vid sjuksköterskeprogrammet. Härigenom möjliggörs ett arbetsintegrerat lärande mellan Högskolan Väst, Sahlgrenska Akademin, Yrkeshögskolan och omgivande Hälso- och sjukvårdsenheter. Ett pilotprojekt har genomförts i form av en teamsimulering **KLC** där studenter från sjuksköterskeprogrammet, vid undersköterskeelever specialistundersköterskestuderande och medverkade. Preliminära resultat från en skriftlig utvärdering av pilotprojektet visar att en majoritet av deltagarna är positiva och önskar fler interprofessionella moment. Under våren planeras därför för fler interprofessionella läraktiviteter där läkarstudenter från Sahlgrenska akademin ska involveras i simuleringsövningar tillsammans med sjuksköterskestudenter. Därefter planeras att succesivt införa fler interprofessionella aktiviteter inom sjuksköterskeprogrammet.

#### Ulf Andersson, Mikael Andersson

"The challenge with the skilled hobbyist"

Having prior knowledge and experience in 3d-graphics or visual effects can give you a head start when embarking on an education within that field. However, experience shows that it is common that those students that have worked with 3d-graphics on a hobby level are stuck in a certain way of working. They have developed methods and workflows that are suitable under hobby-like circumstances, which means that they

have worked in isolation, on a single computer and often without any specific deadlines or time restraints. However, work life is seldom this structured. Instead it is complex and disordered, and requires constant new learning (Bruno et al, 2017).

This is a qualitative study where students from a three year program are interviewed regarding their process of going from a hobbyist to a professional, if any. The results are compared with the concept of the Deliberate Professional, as described by Trede and Jacksson (Trede et al, 2019)

The results of this pilot study suggests that the students to a large extent still are in the "hobbyist"-mindset, and have a low insight in the different requirements of being in the workplace. However, some mentions of constant learning, and the importance of knowledge outside of specific 3d-technology. Some implications for the program is to focus and emphazise what it means to be a professional, and not only expose the students to work-like projects, but also have more occasions for reflection excercises, as described by Bruno and Dell'avarsana (Bruno et al, 2017).

#### Referenser

Bruno, A. & Dell'Aversana, G., 2017. "What shall I pack in my suitcase?": the role of work-integrated learning in sustaining social work students' professional identity. *Social Work Education*, 37(1), pp.34–48.

Trede, F. & Jackson, D., 2019. Educating the deliberate professional and enhancing professional agency through peer reflection of work-integrated learning.

\*\*Active Learning in Higher Education\*, 23(1), pp.146978741986912–17.

#### Fredrik Sunnemark

"WIL certification of the IPPE undergraduate programme at University West"

During 2020 the International Programme for Politics and Economy (IPPE) went through the formal process of WIL-certification at University West. This presentation discusses the challenges that IPPE met as a 'traditional' academic program and how criteria as well as content were developed in the process. During the course of this work, both understandings and possibilities of applications of WIL

where further expanded and put in new perspectives, not least through discussing and pointing out the relation between theory-practice dimension(s) and the course content of the programme. In this presentation I will also discuss how the lessons from the certification process can be used in our international collaborations and how international understandings and applications of WIL can be related to the criteria of the certification as well as how further WIL research can be developed from it.

#### Henri Jacobs

"WIL as pedagogy to transform education"

A key issue in higher education is the demand for graduates who can transfer the knowledge and skills gained in the classroom to the workplace. This has led to a growing interest in work-integrated learning (WIL) and its potential impact on student development to have work-ready graduates going to the workplace that meet employers' expectations regarding the skills graduates should and do possess. Employability therefore remains a central issue regarding WIL. The question to be answered thus is how successful WIL as pedagogy has been in addressing student development and employability?

A recent study conducted at the Central University of Technology, Free State in South Africa (CUT), to develop a WIL strategy to optimise the contribution of WIL towards enhancing the employability of students, included an assessment of WIL as pedagogy in practice through the impact thereof on student development and employability. The study was based on a mixed-method approach, which enabled the researcher to use both quantitative and qualitative methods to address the research problem. The sample size for the quantitative study was 118, constituting the active employers for WIL on the WIL database of CUT. The sample size for the qualitative study was 15, determined as one student who has completed WIL per department with programmes that contain a compulsory WIL component.

The results of the study were that WIL can be regarded as an effective pedagogy based on empirical evidence on how WIL enhanced the employability of students through their personal development inclusive of skills that employers indicated are required in the workplace.

#### **Bettina von Lieres**

"Experiential Learning and the Development of the "Community Knowledge Learning Hub" at the University of Toronto Scarborough, Canada "

The presentation provides an overview of the theoretical underpinnings of the 2017 "Experiential Learning" policy framework adopted by the University of Toronto, Canada, to guide its work-integrated learning and community-engagement programs. For several years the University of Toronto has identified Experiential Learning as a key pillar of its mission. In the University of Toronto's White Paper "Rethinking Higher Education Curricula: Increasing Impact through Experiential, Work-Integrated and Community-Engaged Learning," the authors propose that "the University of Toronto should grow its experiential, work-integrated, and community-engaged learning offerings, and that this growth would collectively enhance both the student learning experience and the University's ability to support broader community and societal needs." The White Paper draws on the work of Dan W. Butin, who developed four models of experiential learning for academic and cocurricular learning. They include the technical dimension of pedagogical effectiveness and innovation; the cultural dimension of the meaning of the program for the individuals and institutions; the political challenge of empowering marginalized groups in society with historically disempowered voices; and the anti-foundational question of how Experiential Learning creates, sustains, and/or disrupts norms, stereotypes, and simplistic views of the world.

The presentation then describes a new initiative, the Community Knowledge Learning Hub (CKLH), at the University of Toronto Scarborough, one of the University of Toronto's suburban campuses in a vulnerable part of the city. The CKLH was launched in 2019 by the departments of International Development Studies and Health Studies to bring local community leaders into undergraduate classrooms as educators and to train students in community-based research. The presentation will distil the challenges and opportunities involved in partnering with local non-profit organisations to build equitable and reciprocal partnerships between universities and local communities in marginalized neighbourhoods. The presentation ends with a few reflections on what we can learn about critical approaches to Experiential Learning from the experiences of the CKLH.

#### **Karl Dahlqvist**

"Reflections of collaboration between student — university — society for research internship within the Master´s programme for Work Integrated Political Studies"

The new Masters in Work Integrated Political Studies is the first advanced program to combine Worked Integrated learning with Political Studies. In line with Work Integrated Learning, students learn, through their studies and placements, skills and knowledge required for their future employment careers. In line with the rationale behind Work Integrated Political Studies (WIPS), students bring to the workplace (within government or civil society) knowledge from their studies at the university, which enables them to invigorate and advance workplaces and their practices from within. More specifically, in the classroom, students learn theoretical principles that inform political and critical engagement on the one hand, and concrete methodological tools to conduct studies that will be required in their line of work, on the other.

The Masters in Work-Integrated Political Studies includes in the second year an internship in a host organization in government or civil society, during which the students conduct applied research for the host. Both the students' studies at the university and research for the host the institution serves as the basis for the Masters'

thesis. In the final year of their study, WIPS students thus operate at two levels of engagements: the first level is the work and study that the students conduct for the host institution. This work has its own methodological and theoretical dimensions that are negotiated and constructed in dialog between the university (supervisor/s), the student, and the host (work-place supervisor/s). The second level of activity surrounds is the Masters' thesis that the students write. While the compilation thesis includes the study or studies from the host institutions, the "Kappa" of the thesis is centered around ethnographic reflections, comparisons, and articulation of the kind of work and knowledge produced at the university (designated as "theory" in the WIL literature) and the kind of work and knowledge produced at the host (designated as "practice" in the WIL literature), and their own role therein, as well as the interrelation and cross-fertilization of these two spheres of activity.

In this presentation, I will use my ethnographic notes from seminars and conversation with staff and students to reflect on the collaborative work between the host institutions, the students, and the supervisors at the university during the internship. Among other things, we have found that the students' encounter at the host organization has informed what we teach at the university; we have modified our supervision sessions accordingly, and by doing so, expanded our own level of knowledge and engagement (i.e., incorporated knowledge from the "work-place"). Another observation is that in collaboration with us (i.e., the academic supervisors/university) the host institution together with the students have developed the studies/work practice in accordance with both established and new theoretical, methodological, and critical advancement within the academy. These preliminary findings thus suggest a knowledge exchange – a possible "hybrid" or "third space" – that bridge the "theory" (university) and "practice" (workplace) divide that underpins the WIL literature, on the one hand, and create new practices/studies that transform the workplace in line with the ethos of Political Studies, on the other.

"The challenges of using digital media for the work integrated learning (WIL) in the

business studies after the sudden outbreak of the pandemic"

Despite the advantages digital media offers such as increased motivation and

attention among students leading to deeper learning (Brown 2001), after the sudden

outbreak of the pandemic it created some challenges for the teachers in business

studies who used to apply workshops, games, company visits, and actively

participating project works involving primary data collection in their courses to boost

work integrated learning (WIL). This paper aims to identify the challenges of using

digital media for WIL in the business studies after the sudden outbreak of the

pandemic. From number of observations, course evaluation and active participation

in teacher's team meetings in the division of business administration, University

West, this paper suggests that the challenges the teachers faced are not only technical

that is related to internet connections and the usability of the media but also teachers'

inability to design appropriate education materials and content, which could be

conveyed through the digital communication tool as well as could be cocreated in

interaction among the teachers and the students through it. Accordingly, the paper

suggests that this challenge can be overcome by managing a sound fit between the

education materials and contents, the tools that communicate the content to the

students and enable sound interaction among teachers and students. Further studies

could be done through in-depth interviews of teachers from different universities

working in the business studies.

Keywords: Digital media, Work Integrated Learning, Business Studies, Pandemic

Linnéa Carlsson

"Content analysis on management discourse in digitalization: A work in progress

discussion paper"

This discussion-based semi-structured literature review aim to map content analysis

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in digitalization for exploring the industrial management discourse. The complex puzzle we refer to as organizations and the question of technology as an inherited part in contemporary manufacturing companies are posed bringing challenges and changes for management in manufacturing companies. This paper reviews Digitalization, IT, The Digital, Smart Industry, I4.0, and Maturity as approaches to qualitative content analysis, elaborating on the level of abstraction and degree of interpretation used constructing categories and themes of meaning in the management discourse. Qualitative content analysis is an autonomous method and can be used at varying levels of abstraction and interpretation. Previous research has treated the phenomena of digitalization as something that needs an answer, others have turned to focus on the context of implications. Either way, digitalization has remained a conundrum relative the industrial management discourse. A key issue is to show the logic in how digitalization is depicted and connected to a management discourse to further understand the phenomena. Illuminating such connections is framed as part of the I-WIL research community's learning, further presented as knowledge gaps probing future research. Drawing on Johansson et al.'s (2017) paper addressing knowledge gaps concerning work and organization, this discussion-based paper aims to address the broad phenomenon of digitalization through a management discourse; Reviewing state-of-the-art literature and presenting viewpoints of the aspects of digitalization showing knowledge gaps for future research using content analysis.

Keywords: Digitalization, content analysis, IT, The digital, Smart industry, Maturity

#### Laurence Piper

"Development and implementation of the new International Master's Programme in Work Integrated Political Studies"

The presentation details the development of a new masters in Work-Integrated Political Studies developed in collaboration between the Department of Political

Studies at the University of the Western Cape in South Africa, and the International Programme in Politics and Economics at University West, Sweden. The Masters is designed as a two-year programme, with the first year taught, and the second year a research placement in a host organisation in government or civil society conducting applied research for the host. The research tasks for the host will be developed between the student, host and supervisor in the first year preceding the internship and written into an individual study plan. During the course of the internship students will also have take a module reflecting on the internship in all aspects, as well as regular meetings with supervisors. Data from the research tasks will also serve as the basis for the Masters' thesis, but will require additional analysis in respect of literature review and theory, both of which are completed prior to the placement. The plan is to develop a programme that offers more rounded training of the student, and better integrates students into the world of work, and strengthens relations between the University and the wider society. In addition, the programme has an international dimension which allows for the placement of students in multiple countries, and the potential exchange of staff and sharing of resources across continents. The hope is that the programme will eventually lead to a PhD in Work Integrated Political Studies too.

### Ulrika Lundh Snis, Andreas de Blanche, Kristina Eriksson, Monika Hattinger, Anna Karin Olsson, Linnéa Carlsson, and Stanislav Belenki

"Artificial and Human Intelligence through Learning: How Industry Applications Need Human-in-the-loop"

This study addresses work-integrated learning from a workplace learning perspective. Two companies within the manufacturing industry (turbomachinery and aerospace) together with a multi-disciplinary research group explore the opportunities and challenges related to applications of artificial intelligence and human intelligence and

how such applications can integrate and support learning at the workplace.

The manufacturing industry is currently under extreme pressure to transform their organizations and competencies to reap the benefits of industry 4.0. The main driver for industry 4.0 is digitalization with disruptive technologies such as artificial intelligence, internet of things, machine learning, cyber-physical systems, digital platforms, etc. Many significant studies have highlighted the importance of human competence and learning in connection to industry 4.0 in general and disruptive technologies and its transformative consequences in particular. What impact have such technologies on employees and their workplace?

There is a lack of knowledge on how artificial intelligent systems actually take part in practices of human decision making and learning and to what extent disruptive technology may support both employees and organizations to "learn". The design and use of three real-world cases of artificial intelligence applications (as instances of industry 4.0 initiatives) will form the basis of how to support human decision-making and scale up for strategic action and learning. Following a work-integrated approach the overall research question has been formulated together with the two industry partners: How can artificial and human intelligence and learning, interact to bring manufacturing companies into Industry 4.0? An action-oriented research approach with in-depth qualitative and quantitative methods will be used in order to make sense and learn about new applications and data set related to a digitalized production.

The contribution of this study will be three lessons learned along with a generic model for learning and organizing in the context of industry 4.0 initiatives. Tentative findings concern how artificial and human intelligence can be smartly integrated into the human work organization, i.e. the workplace. Many iterations of integrating the two intelligences are required. We will discuss a preliminary process-model called "Super8", in which AI systems must allow for providing feedback on progress as well as being able to incorporate high-level human input in the learning process. The practical implication of the study will be industrialized in the collaborating

companies as they want to AI-empower their employees. The tentative conclusion is that AI systems always need to take a detour to humans and her abilities, (e.g. human judgement, cognitive abilities, certainty, trust, experiences etc) and thus make substantial benefits to analytics and enhancements of knowledge and learning.

## Monika Hattinger, Urban Carlén, Erica Byström, Åa Bång, Anna Jansson, Anders Johansson, and Jan Novak

"Collaboration for lifelong-learning and contract education- towards a competence development model"

Competence development and continuous lifelong learning are increasing due to skill transformations in the surrounding world which have an impact on workplaces. Upskilling, down-skilling, re-skilling, and the need of totally new skills are intensified that changes the conditions for a sustainable work practice. Old academic degrees need to be updated and for those lacking one, employees are required to build up academic credits. A constant knowledge and skills development of employees are therefore vital for the changed work conditions, meaning for both the organization and for the individual lifelong learning. In such situation, the university can play a significant role for educating and supporting the working life with higher education in forms that are adjusted to organizational competence needs. With contract education - CE, the Swedish universities can educate staff for competence development on all educational levels, even those without an earlier academic degree. However, only organizations (including private companies and public authorities) can commission a service from a higher education institution. Individuals are not allowed to buy a course place, which is regulated through the jurisdiction of Uppdragsförordningen 2002:760. Despite the many possibilities with CE to collaborate with the surrounding society, it put pressures on the university to organize, support and create new routines for the teaching and administrative personnel for the contract educational process of customer dialogue, needs inventory,

course design, implementation, and follow-up on initiatives.

Given such background, a collaborative development project between six universities in Sweden was conducted between November 2017 until January 2021. Overall aim was to increase the knowledge of CE by developing a collaborative model for competence development. The project was designed to enhance the knowledge in forms of models, methods, and documentation in three development areas for CE; 1) organization and work processes, 2) customer dialogue, needs inventory and course design, and 3) incentives and collaboration skills. Both the conditions of the university's internal abilities, restrictions, and structures (i.e., area 1) as well as the incentives and capabilities for external organizations (customers) involved in the activities (i.e., area 2), have been in focus. Area 3 concerned the teacher's abilities to grant collaborative qualifications by teaching and engaging with external partners.

In an initial case study of area 1 and 2, and we asked: What are the university conditions for organizing contract education, and how is the educational process directing and supporting the working life knowledge requirement?

The second study focused on area 3 and we asked: How does the university grant collaboration skills and qualifications for teachers and leaders involved in contract education?

Study one summarized eight universities responses showing that four universities have a centralized organization for running CE of which two universities have a university enterprise for CE. The other four universities are decentralized organized. It is not clear which organization is most beneficial. However, it seems that central functions are essential for a long-term external collaboration with key customers. The variation of administrative support is large, and there are also many universities lacking a full-fledge support organization for developing sustainable internal routines as well as external collaborations. When it comes to the educational process of routines for CE, most universities in the study show a very similar process, concerning the steps of curricula development, contract development, calculation,

and student admission etc. However, there are various efficiency between the universities built on volume and experience of CE, which effect the time from initialization to evaluation of a CE course. The second and small document and interview study (six interviews) was targeting the teacher's incitement, skills, and their ability to grant contract education work as accreditation in their professional academic career. This study shows that universities generally lack support for skills acquisition regarding "collaboration" skills both for professional development and further qualification. It also shows that the six included universities in the project, have diverse documentation and work practices for collaboration skills accreditation. However, this study and the project itself have pushed, the included universities to start up evaluation of their documents and routines around accreditation.

A summary report for the whole project including a competence development model and methods and as well as findings from the two studies, raises the overarching need to develop the external collaboration university – working life, as well as knowledge about the university conditions for planning, developing, and running contract education as one successful competence model for lifelong learning. Contract education is therefore argued to support work-integrated and lifelong learning through collaborative forms between university and the working life.

#### Josefa Vega Matuszczyk, Kristina Johansson and Martin Schüler

"The student learning context during a pandemic"

In the midst of a semester the COVID-19 pandemic forced many universities to abruptly reorganize courses from being taught on campus to completely being imparted online. Therefore, the present study seeks to explore how students perceived the impact of COVID-19 on psychological well-being, stress, and satisfaction with their studies in a Swedish university. Participants were 560 university students in West Sweden attending courses during the spring semester of 2020. The study is part of a larger study involving eight different countries, including Sweden, with the

objective to examine the impact of COVID-19 on university student's well-being. Although this abstract only cover a small part of the collected data, the Swedish participants. The same questionnaire was sent to all fellow countries. In June 2020, 14571 students at a Swedish university received an e-mail including information about the study, an invitation to participate, and a link to the questionnaire. In total, 560 students chose to take part in the study. They were women (318) and men (242), mean age 29.24 years (18-78) attending courses at undergraduate- (87.60%) and graduate levels. Most participants studied fulltime (87.60%), resided at home (71.60%) and stated they were following Governments recommendations about protection from COVID-19 (79.33%). The questionnaire was written in English, was administered with Qualtrics XM software, and took approximately 20 minutes to complete. The questionnaire included measures of Concerns about COVID-19, Perceived Stress, Well-being, Satisfaction with university information, University Support for Online Learning, having Sufficient Technical Requirements, Social Identification, and Satisfaction with studies. Cronbach's alfa for the different scales ranged from .70 to .93. Spearman correlation analysis showed that satisfaction with studies was significantly related to all other measures. High concerns about Corona (-.096), low University support for Online Learning (-.638), low Satisfaction with University Information (-.549), low Social Identification (-.469), low Well-Being (-.494), High Stress (-.349), and insufficient Technical Preconditions (-.275) affected satisfaction with studies negatively. Mean comparisons with t-test showed significant differences between males and females. Males reported higher satisfaction with studies but significantly lower well-being, less satisfaction with university support for online learning and university information. The differences between males and females, although statistically significant, mean differences were small to moderate (.023 - .044).

It is concluded that University contributions to the change from campus- to online studies are significant factors affecting student's well-being and satisfaction with studies. Furthermore, the role of Social Identification in students Well-being and Satisfaction with studies should be further investigated. The planes for the future is to

write a comparative study in the European project.

# **Reviewers**

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