

## Abstract NORDYRK Conference, June 7–9, 2021

<b>PRESENTATION FORMAT (Paper, poster, workshop or symposium)</b>
Paper
<b>LANGUAGE FOR PRESENTATION</b>
English
<b>TITLE</b>
Collaborative problem solving in real-world situations
<b>AUTHOR(S) and AFFILIATIONS</b>
Halttunen, Timo (University of Turku), Dragin-Jensen, Christian, (Business Academy SouthWest, DK) Kylänpää, Celine, (University of Turku), Karkov, Anders (Business Academy SouthWest, DK)
<b>KEYWORDS (3-5)</b>
collaborative problem solving
<b>TYPE OF WORK: RESEARCH OR DEVELOPMENT PROJECT</b>
Research
<b>FRAMING (General description, aim, theoretical framework), (up to 200 words)</b>
<p>Pedagogic practices aiming at combining formal learning and student exposure to the world of work have become central in efforts to increase graduate employability (Jackson 2014). Educational models like work-based learning (WBL) or work-integrated learning (WIL) have become widely used, emphasizing the need to recognize the social significance of learning from other people (Eraut 2004) and that learning is enhanced when participating in a community of practice (Lave &amp; Wenger 1991). Collaborative problem solving (CBS), as such a pedagogical practice, has mainly been studied in classroom situations. We present a multiple-case study of CBS in a real-world situation, examining student and teacher interactions while they attempt to define and to solve an ill-structured problem in a hotel business environment (see e.g. Ge et al., 2016). Using a business professional as source of instruction and scaffolding, we analyze how students and teachers engage in the learning affordances present on site in the real-world situation. The process of CBS is analyzed using Framework of Teachable Collaborative Problem Solving Skills (Hesse et al., 2015) and results are reported respectively through Participation, Perspective taking, Social regulation, Task regulation, and finally, Learning and knowledge building behaviours of students.</p>
<b>METHODS/METHODOLOGY (up to 100 words)</b>
<p>Research data were collected in Denmark and Finland by means of action research, using observation and interviews with two groups in VET and three groups in HE, comprising of a business professional, students and teachers. Accounts of student and teacher meaning making were also voiced using an online inquiry tool. Findings are reported using table analysis to describe and analyze personal and institutional characteristics affecting student and teacher CBS in a hotel business context. Based on this multiple case study, we present</p>

## Abstract NORDYRK Conference, June 7–9, 2021

a qualitative analysis to identify differences and similarities between the experiments, and within each situation and across situations.

### EXPECTED OUTCOMES (finished/work in progress) (up to 100 words)

Both students and teachers acknowledged that being on-site was meaningful for expanding the learning environment and the learning affordances. Students differentiated on their ability to participate in the experiments, and teachers needed to intervene to offer additional scaffolding. Use of business professional as source of instruction enabled students to direct their perspective taking. However, teacher's role in social regulation was paramount. For task regulation, presence of other sources for scaffolding liberated teachers to focus attention to students with needs. The learning and knowledge building behaviours identified reveal that students underused the situational resources available on site for their learning.

### REFERENCES

Ge, X., Law, V., & Huang, K. (2016). Detangling the Interrelationships between Self-Regulation and Ill-Structured Problem Solving in Problem-Based Learning. *Interdisciplinary Journal of Problem-Based Learning*, 10(2).

Eraut, M. (2004). Informal Learning in the Workplace. *Studies in Continuing Education*. 26. 247-273.

Hesse F., Care E., Buder J., Sassenberg K., Griffin P. (2015) A Framework for Teachable Collaborative Problem Solving Skills. In: Griffin P., Care E. (eds) *Assessment and Teaching of 21st Century Skills*. Educational Assessment in an Information Age. Springer, Dordrecht.

Jackson, Denise. (2014). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*. 40.

Lave, J., & Wenger, E. (1991). *Learning in doing: Social, cognitive, and computational perspectives. Situated learning: Legitimate peripheral participation*. Cambridge University Press.

### NEW OR ALREADY ACCEPTED ABSTRACT? (Choose one of the alternatives)

<input checked="" type="checkbox"/>	<b>This is a new abstract for the Nordyrk Conference 2021.</b>
<input type="checkbox"/>	<b>This abstract was accepted for presentation at the cancelled NordYrk Conference 2020, and will not need a new round of review for the Conference 2021.</b>

Welcome to submit an abstract to the NORDYRK Conference 2021 at the latest 2021-01-31

Send your abstract to: [nordyrk2021@liu.se](mailto:nordyrk2021@liu.se)

Save the abstract file with your name, as MyNameNordyrk.docx

## **Abstract NORDYRK Conference, June 7–9, 2021**

For more information about the conference, see <http://nordyrk.net>