

COVID-19 Leap – not only digital but also pedagogical

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Abstract

This article offers an overview into how Laurea, a Finnish university of Applied Sciences navigated the unprecedented situation with COVID-19 pandemic in 2020. We also share our reflections of the support provided to online teaching and learning through the lens of TPACK and learning design models. The empirical part describes how Laurea supported its academic staff in transitioning their teaching online, and at the same time, introduced a new learning management system. In retrospective, we have learnt about the importance of routine and psychological safety especially in these exceptional circumstances. Teachers also feel more inclined to try out new technologies and methods if there is a safe environment to learn from one's earlier experiences and experiment with new methods.

1 Introduction

The context of this case study is Laurea University of Applied Sciences, a Finnish Higher Education Institution providing education in four core study fields: business, administration and law; health and welfare; information and communication technologies; and services. Before the pandemic emerged, Laurea had made a strategic decision of adopting a new learning management system, Canvas, in 2019. An important part of adoption process was enabling a pedagogical development process parallel to the technical transition to a new LMS. To facilitate pedagogical development, learning design method was applied when guiding teachers to transition to the new LMS.

At the emergence of the pandemic, Laurea teachers faced a double challenge: a new learning management system had to be adopted in parallel with transforming the traditional face-to-face lectures

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to online environment. In order to deliver online courses and to answer the sudden challenge of the pandemic, multi-faceted support for teachers was needed from the university's support services.

2 Theoretical aspects for supporting teachers in going digital

2.1 TPACK model integrates technology to content and pedagogy

The TPACK model by Koehler & Mishra represents well the nature of knowledge required from teachers today. The TPACK model draws on the interplay of three primary forms of knowledge: the technological, pedagogical, and content knowledge. It is not about these three forms of knowledge per se but emphasizing the kinds of knowledge lie also in the intersections between three primary forms. (Koehler & Mishra, 2008, see also Koehler, Mishra, Kereluik, Shin, & Graham, 2014.)

In practice, this means that to create pedagogically meaningful and quality online and hybrid teaching and learning, a teacher needs to be able to integrate not only content and pedagogical knowledge, but also technological knowledge. At Laurea, the TPACK model offers a framework for providing digi-pedagogical support to the academic staff.

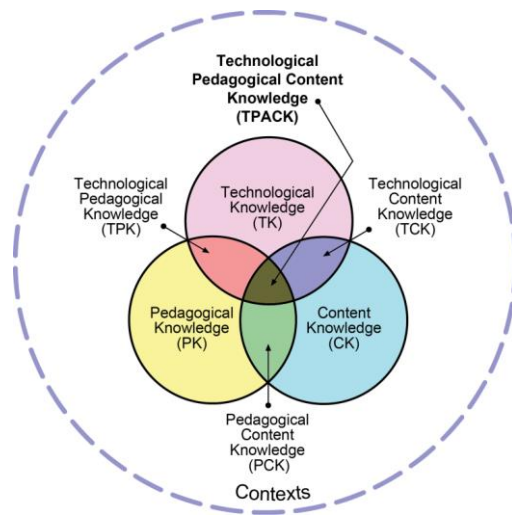


Figure 1: TPACK Model (Koehler & Mishra, 2008; 2009; Koehler, Mishra, Kereluik, Shin, & Graham, 2014)

2.2 Learning design approach raises educational quality

In addition to technical improvements, the introduction of a new learning management system (LMS) was seen as an opportunity for a pedagogical renewal of all teaching offered at Laurea, now only through the modern teaching tools integrated in the platform, but also through a more student-centred approach. Especially in case of online courses, there was a need to ensure more student-centred planning of teaching aiming at providing a rich learning experience for the students. It was hence decided that the introduction of the LMS would include both technical and pedagogical training.

For the pedagogical training, a learning design approach was adopted for planning teaching and learning activities. It is a student-centred approach to plan learning tasks or activity, enacting the

collaborative inquiry that enables teachers to make their intuitive processes both visible and shareable (Ghislandi & Raffaghelli, 2015).

3 Digi-pedagogical support actions for facilitating the creation of hybrid and online teaching and

3.1 Laurea's way of digitalising teaching and learning

At Laurea, the core actors in supporting teachers in the three of TPACK competence areas are digi-pedagogical unit dCELL (The Digital Cell of Laurea), IT department, and academic coordinators for each degree programme. Outside of dCELL, the IT department offers the infrastructure and hardware level support to the whole university. Degree programme coordinators on the other hand are responsible for academic course content and the overall course development.

The dCELL forms the core of digitalizing teaching and learning support at Laurea. It comprises of experts in digital pedagogy and digital learning environments & tools. dCELL is responsible for offering different forms and types of digi-pedagogical support for the teachers to facilitate the creation both hybrid and online teaching and learning environments. A majority of the digi-pedagogical support is built on peer and collegial support. It is widely accepted that being and developing as a teacher requires reflection (e.g., Brookfield, 1995; McAlpine, Weston, C. Beauchamp, Wiseman, & J. Beauchamp, 1999; Schön, 1983). Reflection can also be social, that is, having discussions and sharing experiences and emotions with colleagues have been found to be important in how teachers experience their identities, themselves as teachers and their pedagogical competency (Pekkarinen, Hirsto & Nevgi, 2020; Pyörälä, Hirsto, Toom, Myyry, & Lindblom-Ylänne, 2015; Roxå & Mårtensson, 2009; Uitto, Kaunisto, Syrjälä, & Estola, 2015). The need for social reflection and peer support and learning were taken into consideration while planning and providing support for teachers. For example, we offered a virtual Teams space called "Support for online learning" with different thematic channels for the teachers to have discussions with each other and also with dCELL's digi-pedagogical experts. Teachers could also share their experiences and emotions related to the COVID-19 situation, reforming their teaching, and the pedagogical renewal that had already started before the COVID-19 pandemic emerged.

In addition to above, peer support was utilised in other ways as well. There are, for example, 10 digi-lecturers representing different disciplines and campuses for which the dCELL provides structure for activity. The digi-lecturers spend 20-50% of their working hours supporting and training their peers in online pedagogy. This way the digital unit is strongly connected to the everyday work in the different campuses. Thus, they act as double agents bringing the message from the campuses & disciplines to the dCELL and disseminating dCELL's message to the campuses.

3.2 Support through multiple channels

As can be seen in Table 1, besides the structures based on peer support, the support offered to teachers included frequent online events, such as support clinics organised on Tue and Thu mornings weekly, pedagogical and thematic workshops. These weekly training sessions and specialised workshops also provided a space for getting to know other teachers and networking with them, that further enable unofficial peer support channels for many.

Type of support	Who?	What?
Technical training	dCELL specialists, Canvas agents (teacher volunteers)	Support clinics, thematic workshops
Pedagogical	dCELL specialists, digi-lecturers	Pedagogical workshops, thematic training
Peer support	Digi-lecturers, peers in Microsoft Teams support channels	Collegial support at the campuses, thematic Microsoft Teams channels for discussion and Q&A

Table 1: Type of support offered to teachers in 2020

Laurea teachers using dCELL services were asked to give preliminary feedback through a survey in December 2020 about which services they used and found themselves benefitting the most. A new in-depth survey will be conducted in Spring 2021 and the analysis of the results will be presented as part of the presentation at the Congress.

4 Conclusions and observations

While the online environment offers many possibilities to conduct teaching, there are no clear right or wrong answers to how teaching should be designed in the online environment. However, if a teacher tries to replicate the tradition face-to-face style of teaching online, it is likely that the quality of teaching suffers greatly. Ideally, all courses should be tailored specific to the learning context and target group of students. The support structure provided by Laurea has proven flexible and efficient in answering to the needs of teachers. The weekly training sessions on fixed weekdays provided teachers with routine and psychological safety, since they always knew when and how to get support. Psychological safety also helps one in both experimenting on new methods and technologies and creatively finding solutions most suitable to one's own style of teaching.

The width of the support structure, having both specialists in dCELL and digi-lecturers and Canvas agents supporting from their own role, allows Laurea to give more personalized support to teachers – not merely linking their instructions and other support materials, but also pedagogical help and guidance in building their online courses.

The training sessions in Table 1 above continue even now in 2021 and enjoy constant popularity at Laurea. The digital tools and online spaces also enable peer support and social reflection. Teachers have been reporting that they feel it empowering that one can easily ask help from peers and colleagues, and also, share their own teaching experiences simultaneously.

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6 Author biographies



Suvi Valsta is a MOOC coordinator at dCELL at the Laurea University of Applied sciences. She holds an MA degree from the University of Helsinki and is currently pursuing an MBA in Service Innovation and Design at Laurea. She has a work background in teaching, IT support, and IT management, and was the project manager for the EUNIS2020 Virtual Congress.



Tuija Marstio (MSc, Econ) works as Expert in Digital Pedagogy and Senior Lecturer. She has been working in the field of education and training for more than 30 years and has gained a strong insight in digital pedagogy, online education, digital marketing, entrepreneurial training, digital marketing and international business operations. At Laurea she contributes to the development of online learning through staff training and managing various digital learning initiatives. She has also an extensive background in international project management and has managed several projects in the fields of education and business-related ICT in Latin America, Asia and Africa. She is fluent in Spanish. Ms. Marstio has published several articles on online learning and learning design.



Mrs. Virve Pekkarinen is an Expert in digital pedagogy and a Teacher in charge of the Master level RDI path studies at Laurea University of Applied Sciences. She holds MA degree from the University of Helsinki in Adult Education, and she is an officially qualified teacher. Currently, she is pursuing her PhD in Education, and also MBA in Leading Business Transformation. She has extensive work experience in higher education field in teaching, teacher training, digital pedagogy, university pedagogy, and competency development. Mrs. Pekkarinen has published internationally in the field of university pedagogy e.g., in the Scandinavian Journal of Educational Research and the International Journal of Teaching and Learning in Higher Education. In addition, Mrs. Pekkarinen has acted as peer reviewer in EAPRIL 2016 conference, and she was a member in a team that won the Best Research and Practice Project Award in EAPRIL 2018 conference.



Dr. Anssi Mattila is a Principal Lecturer at the Laurea University of Applied Sciences and an Adjunct Assistant Professor at the Embry-Riddle Aeronautical University (U.S.). Prior to his current position, he specialized in the management of information security and technical information security. He has served the European Commission as an Expert Evaluator and current research interests include improving the quality and efficiency of online learning environments, enhancing creativity in designing online courses, and advancing online teaching skills and competences. Publication activities include journals like International Journal of Financial Services Management; Problems and Perspectives in Management; Journal of Education, Psychology and Social Science; International Journal of Computing and Business Research; International Journal of Enterprise Computing and Business Systems. Dr. Mattila is an open-minded professional whose motivational value system of flexible-cohering concerns for flexibility, the welfare of the group and its members.