Successful collaboration between higher education and working life requires pedagogical competence and communication skills from teachers

Tässä katsausartikkelissa esitellään Hämeen ammattikorkeakoulun (HAMI) Biotalouden koulutuksen yksikön opettajien työelämäosaamisen tutkimus- ja kehittämisohjelma, jossa tarkasteltiin työelämälahtöiset oppimisprojektit ja opettajien toiminta oppimisprojektien ohjaajina. Hankkeen ensimmäisessä vaiheessa syvähän kohdattelteriin viisi bio- ja kierrävästyslouduksen korkeakouluprojektia, jotka ovat toteuttaneet aktiivisesti oppimisprojekteja yhdessä työelämäkumppaneidensa kanssa useiden vuosien ajan. Haastattelujen analysoinnin perusteella muodostettiin viisi kuvasta opettajan osaamisista, jotka haastateltavat kokivat merkityksellisiä onnistuneissa työelämälahtöisissä oppimisprojektissa: 1) oppimisprosessiosaaminen, 2) opiskelijan motivointiosaaminen, 3) yhteistyö- ja neuvotteluosaaminen, 4) asiakasosaaminen ja 5) oman työn johtamiosaaminen.

Hanke jatkuu ehdotettujen osaamisten arvioinnilla, työelämäprojektien pedagogisten käytänteiden tutkimuksella sekä työelämänkumppaneiden, esimerkiksi biotalouden yritysten, näkymysten ja kokemusten kartoituksella. Tutkimustulosten perusteella kehitetään 

Bio- ja kierrävästyslouduksen kestävän työelämäyhteistyön ja verkostointumisen malli, jota sovelletaan myös HAMI:n osaamisen kehittämisohjelmissa sekä ammatillisessa opettajankoulutuksessa.

Abstract

The focus of this applied research and development project is on the pedagogical competences of teachers in the collaboration between higher education and working life. The context is implementing work-based learning projects in The School of Bioeconomy at Häme University of Applied Sciences (HAMK). In the first phase of the process, five (5) higher education teachers were interviewed about their experiences of facilitating learning projects as a form of collaboration with working life. The preliminary results emphasize the importance of the following teachers’ competences in successful collaboration and student learning: 1) pedagogical competence, 2) student engagement competence, 3) interaction and communication competence, 4) customer competence and 5) self-management competence. The project continues by reviewing the suggested competences, examining pedagogical practices implemented in work-based learning projects and analyzing the viewpoint of the working life organizations, companies and industries. From the basis of the results, the project team designs and conceptualizes the model for sustainable collaboration and networking between higher education and working life in bio- and circular economy. The model is implemented in competence development programmes and in teacher education in HAMI.

Description of the project

The context of the project is degree programmes studies in The School of Bioeconomy at Häme University of Applied Sciences (HAMK). HAMK is situated in close vicinity to the main metropolitan area in Finland and has features from both high-density urban and traditional rural areas. HAMK caters for more than 7000 students and 650 staff members in multidisciplinary degree programmes. The School of Bioeconomy operates in the area of natural resources, rural development and circular economy and has degree programmes of agricultural and rural industries, biotechnology and food engineering, built environment, forestry, horticultures, sustainable development and bioeconomy business development.
In line with the Finnish road map to the circular economy 2016-2025 (2016), The School of Bioeconomy is searching for new solutions to ensure that economic growth is no longer based on the wasteful use of natural resources, promoting the circular economy as a significant opportunity to increase employment in Finland and the Hame region. This development trend and disruption in bioeconomy requires solid and sustainable collaboration between higher education and working life; the industry needs skills and competences for generating new knowledge and innovations and boosting co-operation across sectoral and industrial boundaries. Also, Tavoletti sums up (2010, 7) that matching higher education and the labour market is critical for workers in knowledge economies as well as in transformations of the labour market itself.

The project is a joint action of two units from HAMK’s applied research: The Bioeconomy Research Unit and The Research Unit of Professional Excellence. The first one operates in The School of Bioeconomy and the latter one in The School of Professional Teacher Education covering e.g. themes of digital disruption at work, future working skills and vocational teachers’ competences. The research units represent new forms of collaboration with working life in universities of applied sciences that novel modes of knowledge production and new professional requirements need. Tynjälä, Valimaa, & Sarjä’s (2003) agree that the goal of the research units is to develop new pedagogical and educational thinking and practices in higher education.

Teacher interviews

The focus of the project is on the relationship between higher education and working life from the viewpoint of teachers’ competences, student learning and sustainable pedagogical practices. In the first phase of the process, five (5) teachers from bioeconomy degree programmes were interviewed in-depth, specifically their experiences of facilitating learning projects as a form of collaboration with working life. Studying in degree programmes has been organised to eight-week competency-based modules in HAMK. Every module includes a work-based learning project or a phenomenon-based case in collaboration with working life. Teachers of the degree programmes guide the modules and facilitate the learning projects together in teams of 2-4 persons.

The teachers chosen to the interview are experienced higher education bioeconomy teachers who collaborate actively with working life representatives from a variety of companies and industries. The interviews concentrated on the reflections of success factors and challenges of work-based learning projects, teachers’ competences and student learning.

Results and continuation

The analysis of the preliminary results reveals five teachers’ competences that the interviewees considered important when facilitating learning projects successfully: 1) pedagogical competence, 2) student engagement competence, 3) interaction and communication competence, 4) customer competence and 5) self-management competence.

According to the interviewees in this project setting, pedagogical competence means the teachers’ capability to plan a meaningful and effective student-centered learning process. This competence includes the implementation of relevant pedagogical practices and student guidance methods during the learning process. The competent teacher can adapt curriculum goals (e.g. domain-specific skills) to the students’ personalized learning goals. He or she can also connect the learning project goals to working life partners’ strategies and goals. This process of balancing and combining a variety of goals and strategies was also critically described as one of the main challenges when facilitating work-based learning projects in higher education.

The interviewees pointed out that the co-operation with other teachers was crucial for the success to manage and facilitate work-based learning projects in modules. Salonen and Savander-Ranne (2015) agree that the important element of a teacher’s work in a university of applied science is co-operation when constructing, de-constructing, and re-constructing knowledge, planning together and teaching in teams.

Student engagement competence means in this setting teachers’ intentional actions to engage, motivate and inspire students to establish and maintain sustainable relations and collaboration with working life representatives. This approach underlines the importance of guiding students to recognize and reflect their own motivational aspects of studying as well as encouraging students towards positive attitudes and behaviours (e.g. commitment, trustworthiness, making initiatives) when studying in authentic working life environments.

The interviewees pointed out that interaction and communication competence was crucial for making any initiative to work. Teachers need interaction skills in guidance and knowledge construction with students and in building networks with working life. Also, Salonen and Savander-Ranne (2015) have found that a teacher’s core competence is the capacity to interact effectively with students, other teachers and partners outside the institution. Customer competence was described as a teacher’s capability to share a working life partner’s (e.g. a company’s or an industry’s) customer orientation and connect this insight into work-based learning projects. In addition, the interviewees underlined the importance self-management competence. This
means a teacher’s skills to manage his or her workload and resources, plan realistic schedules and pay attention to his or her personal well-being and resilience.

The project continues by reviewing and re-evaluating the teachers’ competences suggested in the first phase of the process. The new data is collected with an Internet questionnaire where a larger focus group of teachers of bioeconomy will assess and further define the competences. The project team also examines the pedagogical practices implemented in learning projects in more detail, as well as analyze the viewpoint of the working life partners.

From the basis of the results, the project team designs and conceptualizes the model for successful and sustainable collaboration between higher education and working life in bioeconomy. The model is implemented in competence development programmes and teacher education at Hämme University of Applied Sciences and in HAMK’s global education export programmes of bio- and circular economy.

REFERENCES


