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The problem addressed by this research is the increasing gap between the digital and networked society and the traditional higher education (HE) curriculum. The data of the European Digital Economy and Society Index (DESI, 2017) shows that 79% of Europeans go online regularly (at least once per week). 70% of Europeans read news online and 63% use social networks. With the increasing employability of students, early involvement in the labour market and increased migration, learners search for more flexible and open learning possibilities, for a digital and accessible curriculum, as well as for flexible forms of recognition of learning achievements. The survey data of the HE Monitoring and Analysis Centre (MOSTA) in Lithuania (Repeckaite, 2016) shows that 18-22% of students leave university or college during their first year of academic studies, while up to 10% of students leave HE establishments during the second and third year of their bachelor studies. Up to 14% of Master students leave their unfinished studies at HE every year (Repeckaite, 2016).

The study implemented by the EC JRC on “Changing pedagogical landscape” (Haywood, et al., 2014) claims that the uptake of ICT in teaching, learning and innovation in pedagogy is still insufficient to enable the degree of flexibility and accessibility needed for national economic success and personal fulfilment of citizens. The main trend in research on open online learning (OOL) is directed towards studying innovative pedagogy (Marc, & Barbera, 2013; George, Forsey, & Riley, 2013). Research in OOL (Lewis, 1986; Tait, 2000; Rumble, 1989; Thorpe, 2002; Hilton, Wiley, Stein, & Johnson, 2010) has revealed that a student lifelong learning model should not be restricted to the traditional students; non-traditional groups should benefit as much from OOL.

The complexity of research in this field covers open learning, OOL environments (Hannafin, et al., 1999; Gooley, & Lockwood, 2012), OOL curriculum (Stevenson, 2001; Siemens,
2013; Rodrigues, 2012; Deboer, Ho, Stump, & Breslow, 2014), analysis of student behavior and recognition of OOL achievements. While there have been many research papers by foreign researchers on the topics since 1986, there are too few references to the authors from Lithuania, especially with regards to learning analytics (LA) method as a metacognitive tool (Gasevic, Dawson, & Siemens, 2015; Ferguson, 2012; Durall, & Gros, 2014) and assessment and recognition of OOL (Schmidt, Geith, & Thierstein, 2009; Camilleri, Ferrari, Haywood, & Maina, 2012; Garcia–Penalvo, Johnson, & Alves, 2014). The aforementioned authors point out the need for further research that would enable the setting up of specific strategies for advancing the recognition of OOL in Europe.

The aim of the project is to develop university teacher research competences to create open and online learning possibilities that would satisfy the needs of the digital and networked society and transform university practices.

The objective is to enable university teachers to design open and online learning through open and online learning curriculum and environment by applying learning analytics as a metacognitive tool and creating open and online learning assessment and recognition practices and responding to the needs of the digital and networked society.

The project will be implemented through three main activities:

1. To identify the needs of digital and networked society for open and online learning through transformation of open and online learning curriculum and environment by:
   a) description of digital and networked society and identification of digitalised and networked society needs for open and online learning; b) description of characteristics of the transformed open and online learning and curriculum, with the focus on the importance of Open Educational Resources; and c) assessment of open and online learning environments in order to establish the model of such an environment by meeting the needs of digitalised and networked society.

2. To use scientific research in order to explain the method of learning analytics as a metacognitive tool by: a) describing the learning analytics method as a metacognitive tool in open and online learning; b) providing evidence of students’ learning performance methods in educational settings (decision tree, clustering, association rules, time sequence analysis, visualisation techniques, etc.) by analysing the learning behavioural patterns of different student groups in open and online learning; c) revealing teacher practices in the application of the learning analytics method in the study process; and d) creating the model of application of the learning analytics method as a metacognitive tool to enhance student success.

3. To use scientific research in order to identify the requirements for the process of open and online learning assessment and recognition, relating them to the national and European qualification framework (EQF) by: a) adaptation of the learning results’ assessment and recognition process characteristics to open and online learning; b) establishment, implementation and piloting and digital badges as the tool for open and online learning assessment and recognition; and c) developing open and online learning assessment and recognition guidelines in reference to the national and European qualification framework.

This research project is unique, as it unites several interdependent research objects in one project in order to enable researchers to create OOL possibilities that meet digital and networked society needs.