

FRI-2G.305-1-ERI-05

APPRENTICESHIP CLUSTER IN MECHANICAL ENGINEERING AND MECHATRONICS⁴

Irena Rashkova, MA

Department for Language and Specialized Training,
Technical University of Gabrovo, Bulgaria
Tel.: +359 66 827 421
E-mail: irena.rashkova@yahoo.com

Tsvetelina Petrova, MA

Department for Language and Specialized Training,
Technical University of Gabrovo, Bulgaria
Tel.: +359 66 827 421
E-mail: petrova.tsvetelina@yahoo.com

Abstract: *The paper views the relationship between industry and higher engineering education, in particular within the region of Gabrovo, which shows a certain mismatch between the skills of engineers demanded by enterprises and the skills of young engineering graduates supplied by technical universities. To respond to that challenge, an alternative educational path at tertiary level is proposed by an international team of university lecturers, business people, local authorities, employers' organizations and social partner in the area of Mechanical Engineering and Mechatronics. A completely new form of higher education, known in most European countries as dual/cooperative studies, is considered – work-based learning with focus on apprenticeship. Actually the present paper presents in details one of its tools – an apprenticeship cluster in Mechanical Engineering and Mechatronics, which is intended to bridge the gap between the worlds of business and education so as to boost economic growth at regional level.*

Keywords: *apprenticeship cluster, work-based learning, apprenticeship, skills mismatch, engineering graduates, academic and company mentors*

JEL Codes: *I25*

REFERENCES

Zaouini M. *Nine challenges of Industry 4.0*. IIoT World. URL: <https://iiot-world.com/connected-industry/nine-challenges-of-industry-4-0/> (Accessed on 20.09.2018).

Schröder C. (2016). *The Challenges of Industry 4.0 for Small and Medium-sized Enterprises*. Friedrich-Ebert-Stiftung.

European Commission. (2012). *Work-Based Learning in Europe. Practices and Policy Pointers*.

URL:http://ec.europa.eu/dgs/education_culture/repository/education/policy/vocational-policy/doc/alliance/work-based-learning-in-europe_en.pdf .

(Accessed on 20.09.2018).

Fiacco, F. et al. (2014). *Intermediate Report on Work-Based Learning Needs and Gaps*.

URL: http://www.erasmusplus.it/wp-content/uploads/2015/07/3_NetWBL_WBL_Needsgaps.pdf (Accessed on 20.09.2018).

⁴ Reports Awarded with "Best Paper" Crystal Prize – 57th Science Conference of Ruse University, Bulgaria, 2018, ISBN 978-954-712-753-1.