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# STEM (Science–Technology–Engineering–Mathematics) Based Entrepreneurship Training, Within a Learning Company

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**Abstract :** To prepare the current generation for the future, education systems need to change. It implies a way of learning that meets the demands of the times and the environment in which we live. Productive interaction in the educational process implies an interactive learning environment and the possibility of personal development of learners based on communication and mutual dialogue, cooperation and good partnership in decision-making. Students need not only theoretical knowledge, but transferable skills that will help them to become inventors and entrepreneurs, to implement ideas. STEM education , is now a real necessity for the modern school. Through learning in a "learning company", students master examples from classroom practice, simulate real life situations, group activities and apply basic interactive learning strategies and techniques. The learning company is the subject of this study, reduced to entrepreneurship training in STEM - technologies that encourage students to think outside the traditional box. STEM learning focuses the teacher's efforts on modeling entrepreneurial thinking and behavior in students and helping them solve problems in the world of business and entrepreneurship. Learning based on the implementation of various STEM projects in extracurricular activities, experiential learning, and an interdisciplinary approach are means by which educators better connect the local community and private businesses. Learners learn to be creative, experiment and take risks and work in teams - the leading characteristics of any innovator and future entrepreneur. This article presents some European policies on STEM and entrepreneurship education. It also shares best practices for training company training , with the integration of STEM in the learning company training environment. The main results boil down to identifying some advantages and problems in STEM entrepreneurship education. The benefits of using integrative approaches to teach STEM within a training company are identified, as well as the positive effects of project-based learning in a training company using STEM. Best practices for teaching entrepreneurship through extracurricular activities using STEM within a training company are shared. The following research methods are applied in this research paper: Theoretical and comparative analysis of principles and policies of European Union countries and Bulgaria in the field of entrepreneurship education through a training company. Experiences in entrepreneurship education through extracurricular activities with STEM application within a training company are shared. A questionnaire survey to investigate the motivation of secondary vocational school students to learn entrepreneurship through a training company and their readiness to start their own business after completing their education. Within the framework of learning through a "learning company" with the integration of STEM, the activity of the teacher-facilitator includes the methods: counseling, supervising and advising students during work. The expectation is that students acquire the key competence "initiative and entrepreneurship" and that the cooperation between the vocational education system and the business in Bulgaria is more effective.

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