Designing learning-skills towards industry 4.0

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Abstract

The world is shrinking now more than ever due to new scientific and technological breakthroughs that expand the boundaries of human knowledge, resulting in improvements in transportation, communication, space exploration and educational technologies. Today’s students will compete in a technological, diverse, multi-cultural world and must be prepared to thrive in this futuristic environment. Therefore, it is vital that today’s pedagogy produce lifelong learners, who can succeed in a global pulpit. To ensure our educational technology progresses at the rate demanded by today’s ubiquitous digital learners, we review emerging technologies and traditional teaching methods and propose desirable changes. Future companies will need employees with specific Internet of Things connected additive manufacturing skills across the value stream, including computer-aided design, machine operation, raw material development, robotics and supply chain management; but these are only island of excellence in industry 4.0 and not the consummate requirement of the manufacturing process. © 2019, Sciencepark Research Organization and Counseling. All rights reserved.

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