

# Industry Revolution 4.0 and Its Impact on Education



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## INTRODUCTION

People can get the information and use it as a competitive advantage. The coming of millennial kids with advanced intelligence and digital ability has poses numerous difficulties to instructors. Advanced locals exploit the tremendous assets of the internet and computerized innovations to make something imaginative, inventive and expressive in spite of digital security issue. These techno addicts and Wi-Fi generation likewise incline toward an intelligent way to deal with learning which mixes data through framework joining by means of an intricate montage of pictures, symbols, sound, video, recreation activity, diversions, and Artificial Intelligence. The fourth Industrial Revolution is the stage in the development of knowledge in which the lines between physical, digital and biological spheres are being blurred. The rapid changes of knowledge have developed the new model of education for the future.

## Impact of IR 4.0 in Education

The higher education of the Fourth Industrial Revolution is a dark, rationalistic and energizing open door that can eventually change society for the better. The Fourth Industrial Revolution is fueled by awariness of counterfeiting and it will change the working environment from assignment-based attributes to human-centered qualities (Abdelkader el al. 2013). Many people are displaced due to the loss of their jobs, 7 billion people in the world but only 3.5 billion have access to connectivity. Peter Drucker, 1997, said universities will not survive. Higher education is in deep crisis. There are no techers, books or tuition. Students work in projects and take several internship programs at designed levels. Once the projects are complete, they will earn points to advance to the next level. Character education is still necessary and relevant. 3RT's holistic approach to character education includes the importance of revitalizing, innovative, creative and communicative education, using technology and involving parents. The balance between technology use and personality will create a generation that is both competitive and dignified. Involvement of all parties is the key to students transformation. Education ready to face the era of industrial revolution 4.0 is characterized by the enhancement of human resources' ability to master technology. Policies governing the education system all around the world include the relevance of curricula, personnel capacity, use of information technology and development of personality values, improvement of technological facilities (Gray 2016). 21st century skill include: First, learning and innovation skills which include mastering a variety of knowledge and skills, learning and innovation, critical thinking and problem solving, communication and collaboration, creativity and innovation. Second, skills include digital literacy, information literacy, media literacy, and ICT literacy (Aoun 2018). Third, career and life skills include flexibility and adaptability, initiative, social and cultural interaction, productivity and accountability, leadership and responsibility. Because Generation Z students love digital tools,

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they hope to have these tools with low access barriers available whenever they need them. Industrial revolution 4.0 is driving the world through changes that are increasingly rapid and competitive. First, students can think critically. Second, students are expected to have creativity and innovative abilities. Third, communication skills and competence. Fourth, the ability to cooperate and collaborate, and finally, students' self-confidence. The World Economic Forum has estimated the ten best skills for the future. Creativity will be one of the 6 skills that employees need. Meanwhile, Latip argues that there are at least four competencies that teachers must possess in the industrial revolution 4.0:

### **Cooperation**

This skill is very important now and in the future. This is not very difficult to do, because the world is already interconnected, so there is no reason not to cooperate with others.

### **Creativity and Risk-Taking**

Teachers need to model this creativity and take on how it is integrated into their teaching.

### **Having a Good Sense of Humor**

Reduces stress and frustration while providing opportunities for others to see life from the other side.

### **Teaching ability**

The student also expects the lecturer to be expert in the academic and practical part of courses. It is even more crucial for hands-on courses. Motivation and enthusiasm in teaching, together with pedagogy knowledge, support lecturer in determining a perfect method to deliver a lesson in class and ensure a complete understanding among students. Thus, it will lead to student satisfaction while the institution will accomplish its goal and remain profitable (Baur, 2015).

IR 4.0, which is full of fast technology, has also brought important changes in the education system. These changes in the education system will undoubtedly have an impact on curriculum construction, the role of teachers as educators, and the development of ICT-based educational technologies. There is a new challenge to reinvigorate our education to train competent, creative and innovative people who can compete globally. There are many studies in the field that reveal that curriculum implementation revolves around only targeted academic values that stem from the context and no longer aim to gain students' ability to understand science in the context of daily and life skills competencies especially, has it is broadly researched, in Malaysia (Bell, 2010). Aligning practice-level learning adapted to curriculum structures becomes the initial focus of completing homework in the field of education. Curriculum policy should detail students' pedagogical abilities, life skills, ability to live together, and critical and creative thinking. It promotes soft skills and transversal skills, life skills and invisible skills not related to specific technical and academic fields. However, critical and innovative thinking skills are widely useful in many work situations, such as interpersonal skills, global-minded citizens and media literacy and available information. Teacher Competence and Skills for International Relations: Industrial revolution 4.0 has had a significant impact on various fields, not just teachers, doctors, nurses and the arts. The role of the teacher as an educator, teacher, mentor and 'parent' in the school as a whole will not be replaced

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