

# Transferable Skills in Vocational and Educational Training, Lower Secondary School and Industry 4.0

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## **Abstract**

Industry 4.0 holds ever-increasing influence in the workplace as well as on employee requirements which, in turn, creates challenges for school systems. The objective of this study is to examine how educational vocational and training systems and lower secondary school are adapted to meet students' needs and equip them with transferable skills to enable their successful transition into Industry 4.0. The study focuses on the primary skills within Industry 4.0 and analyses the curriculum of three different Diploma of Vocational Educational trainings as well as examining two interviews between apprenticeship trainers and an apprentice. Each curriculum is examined to ascertain which of the primary Industry 4.0 skills are covered. The study demonstrates that although in all curricula self-competence and social competence are essential components, there is a tendency for some main skills essential to Industry 4.0 not be covered to their full extent. These include for example networking, problem solving skills, openness to change, resilience, creativity, key communicative, emotional and innovation skills. These skills are often not clearly delineated, or indeed, at times, underrepresented or completely absent in the curricula, the reasons for which will need further investigation. Consequently, this may jeopardise a successful transition from school to Industry 4.0, thereby hindering students' future progress within the workplace. It is highly recommended that school systems adapt to the new dynamics within the labour market to help guide students towards successful futures, to foster educational equity and to bolster the economy.

**Keywords:** curricula, economy, educational equity, school system, skills