

The Future of Work and the Near Future of Intercultural Communication: Leveraging Dual Education





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The manual explores the future landscape of work, skills, and higher education through the conceptual lens of intercultural communication. Projecting the organizational future of work, it presents the skills deemed crucial, envisions the role of the university in this changing landscape and examines the concept of dual education, emphasizing a win-win partnership between universities and industry. Shifting the focus to European policy frameworks for intercultural education, the manual discusses the policies that govern and promote intercultural education in the European context and the role of intercultural communication in shaping the future of work. Finally, the manual outlines a model that incorporates intercultural aspects into dual education programs to ensure the readiness of the workforce for the challenges ahead. The volume sets out to provide a timely exploration of the interconnected themes of future work, skills development, intercultural education, and the evolving role of universities in preparing individuals for the dynamic future of the workforce.

TABLE OF CONTENTS

INTRODUCTION	2
CHAPTER 1. The Future of Work, the Future of Skills and the University of the Future. . . .	5
1.1. From a VUCA to a BANI World: Projecting the Organizational Future of Work	5
1.2. The Skills for/of the Future.	11
1.3. Envisioning the University of the Future	16
CHAPTER 2. Dual Education: A Win-Win Partnership between Universities and Industry in the Context of Policy Development	21
2.1. Conceptualizing Dual Education.	21
2.2. Evolution of Work-Integrated Learning: The <i>Berufsakademie Model</i> in Germany	25
CHAPTER 3. European Policy Frameworks for Intercultural Education	27
3.1. Intercultural Education: What is in the Name?	27
3.2. Institutionalization of Intercultural Education.	30
CHAPTER 4. The Role of Intercultural Communication in the Future of Work	33
4.1. Cultural Intelligence as a Skill for the Future of Work.	33
4.2. Communication, Cross-cultural Collaboration and Organizational Success.	35
CHAPTER 5. Intercultural Model of Dual Education for the Future-Ready Workforce.	39
5.1. Connecting Intercultural and Dual Education	39
5.2. Approaches to Curriculum Adaptation for Intercultural Dual Education.	43
KEY MESSAGES	45

INTRODUCTION

In an ever-evolving global landscape, the dynamics of work and communication are undergoing profound transformations. As we stand at the crossroads of technological advancements, shifting organizational paradigms, and the imperative of intercultural collaboration, the Future of Work emerges as a compelling concept. The Future of Work transcends the conventional notions of employment and industry, ushering in a new era where intercultural competencies reign supreme. Organizations and individuals are confronted with a myriad of opportunities and challenges that necessitate novel approaches to education, communication, and collaboration. This manual serves as a comprehensive exploration of the multifaceted landscape that constitutes the Future of Work, while specifically focusing on the integration of Dual Education as a strategic lever for success.

Within these pages, we navigate through the pathways that define the implications of the Future of Work for both organizations and individuals. We unravel the symbiotic relationship between academia and industry through the lens of Dual Education, a transformative partnership that empowers learners to bridge theoretical knowledge with practical acumen. Moreover, this manual illuminates the overarching policy frameworks that facilitate the convergence of education and industry, fostering an environment conducive to innovation and growth. Central to our exploration is the profound significance of Intercultural Communication within the Future of Work. We delve into how diverse cultures, perspectives, and backgrounds converge to shape a future-ready workforce. Through an exploration of European policy frameworks focused on intercultural education, we unravel the tactics that form the foundation for nurturing a workforce skilled in effectively navigating the complexities of the globalized marketplace.

To consolidate the findings, the final section of the manual introduces the Intercultural Model of Dual Education, a transformative blueprint that integrates intercultural competencies into the educational landscape. This model propels learners towards holistic development, ensuring they are well-equipped to thrive in a world defined by collaboration, empathy, and effective communication.

Education has frequently faced criticism for producing graduates who may not be adequately prepared for their professional roles. While they often possess extensive knowledge and have undergone comprehensive training in their respective

fields, their ability to apply this knowledge effectively in practical work scenarios may be restricted. This limitation can result in a misalignment between their capabilities and the expectations of various stakeholders, including employers, managers, supervisors, colleagues, clients, and the general public¹.

Globally, there has been a growing interest in competence-based education as an innovative approach to better equip individuals to perform at their best. Its primary objectives include bridging the divide between education and the workplace, as well as aligning educational programs across vocational, professional, and higher education sectors with the evolving demands of the labor market and societal developments. This educational philosophy has posed a challenge to traditional education methods that rely on rote memorization and repetitive testing, urging institutions to adopt a more forward-thinking, application-oriented approach.²

The notion of competence has demonstrated remarkable resilience, emerging as the defining feature of European policies concerning employment, education, and training. As Mulder posits, since its inception in November 1997 during the Luxembourg Summit, the European Employment Strategy (EES) has implemented various measures aimed at enhancing employability and adaptability. These measures were pivotal in addressing unemployment, boosting employment rates, promoting worker mobility, and facilitating smoother transitions from education to the workforce (EC 1997)³. Central to the EES was the development of the competence of the working population. Furthermore, the high skills strategy, introduced at the Lisbon Summit in March 2000, reinforced this commitment by establishing the ambitious policy goal of positioning Europe as “the most competitive and knowledge-based economy in the world capable of sustainable growth and better jobs and greater social cohesion by 2010” (EC 2000: para. 5)⁴.

Thus, in this manual, we align our terminology with the policy documents and recommendations set forth by the European Commission⁵.

¹ Mulder, M. (ed.) (2017) *Competence-based Vocational and Professional Education Bridging the Worlds of Work and Education*. 1st ed. Cham: Springer International Publishing.

² Mulder, M. (ed.) (2017) *Competence-based Vocational and Professional Education Bridging the Worlds of Work and Education*. 1st ed. Cham: Springer International Publishing.

³ European Council (EC). (1997). *Extraordinary European council meeting on employment*, Luxembourg, 20 and 21 November, Presidency conclusions.
doi: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00300.htm

⁴ European Council (EC). (2000). *Lisbon European Council 23 and 24 March 2000 presidency conclusions*. http://www.europarl.europa.eu/summits/lis1_en.htm

⁵ *Key competences for lifelong learning*. Corporate author: The European Commission. Publications Office of the European Union, 2019

The **key competences** are a combination of knowledge, skills and attitudes.

- **Knowledge** is composed of the concepts, facts and figures, ideas and theories which are already established, and support the understanding of a certain area or subject.

- **Skills** are defined as the ability to carry out processes and use the existing knowledge to achieve results.

- **Attitudes** describe the disposition and mindset to act or react to ideas, persons or situations.

The European Commission outlines a collection of eight essential competences, with certain ones holding notable significance in relation to Intercultural Communication within the framework of the Future of Work. These competences include literacy competence; multilingual competence; mathematical competence and competence in science, technology and engineering; digital competence; personal, social and learning to learn competence; citizenship competence; entrepreneurship competence; cultural awareness and expression competence.

CHAPTER 1.

The Future of Work, the Future of Skills and the University of the Future

The **future of work** stands as a paramount contemporary conceptualization, gaining widespread use among diverse stakeholders and within the media landscape. It represents a forward-looking vision - “a projection of how work, working, workers and the workplace will evolve in the years ahead from the perspective of different actors in society, influenced by technological, socio-economic, political, and demographic changes”.⁶ As is evident, the discussions on the future of work pertain to multifaceted aspects, encompassing the nature of the activity (*what*), the process of work (*how*), the individual engaged (*who*) and the workplace (*where*), or any combination thereof.

Taking this premise as a starting point, the opening chapter aims to provide a comprehensive overview of the future of work and its prospective implications for the future of skills and the vision of the university of the future.

1.1. From a VUCA to a BANI World: Projecting the Future of Uncertainty

Originating in the post-Cold War era, the VUCA concept emerged to elucidate the evolving dynamics of the new world. The prevailing view was that the world exhibited *Volatility, Uncertainty, Complexity, and Ambiguity*, often abbreviated as VUCA. Since that time, this term has been employed to depict technological advancements and shifts in culture, illustrating their influence on the everyday experiences of individuals and businesses. In the realm of business, the term VUCA gained prominence during the 2000s, a period coinciding with significant technological shifts, specifically the inception and widespread adoption of the Internet.

In the 2018 book *Skin in the Game*, Nassim Nicholas Taleb, well-known for his work on risk, probability, and the impact of rare events, as highlighted in his earlier books such as *The Black Swan* and *Antifragile*, introduced the BANI framework that is part of his broader exploration of the challenges and characteristics of our current complex and unpredictable world. The term BANI stands for *Brittle, Anxious, Nonlinear, and Incomprehensible*, and it represents a concept similar to the VUCA

⁶ Lynn, Th., Rosati P., Conway E. & van der Werff L. 2023. Introducing the Future of Work: Key Trends, Concepts, Technologies and Avenues for Future Research. In: Lynn, T., Rosati, P., Conway, E., van der Werff, L. (eds) *The Future of Work. Palgrave Studies in Digital Business & Enabling Technologies*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-31494-0_1

framework, emphasizing the fragility and unpredictability of various systems, particularly in the realms of technology, society, and geopolitics.

Let us undertake a comprehensive analysis of each constituent element encapsulated within the BANI conceptual framework⁷:

- **Brittle** refers to the fragility and vulnerability of systems, structures, and institutions. In a BANI world, traditional and rigid structures may be more susceptible to disruption or breakdown due to rapid changes and unexpected events.
- **Anxious** signifies the heightened state of anxiety or nervousness prevalent in a BANI world. This reflects the uncertainty and unpredictability that individuals and organizations experience in the face of rapid technological advancements, social changes, and geopolitical shifts.
- **Nonlinear** describes the nonlinear nature of relationships and developments in a BANI world. Unlike linear progressions, where cause and effect are straightforward, a nonlinear environment implies that small changes can lead to disproportionately large and unpredictable outcomes.
- **Incomprehensible** highlights the complexity and difficulty in understanding the intricacies of the BANI world. Rapid technological advancements, information overload, and the interconnectedness of global systems contribute to an environment where events and their implications may be challenging to comprehend fully.

The BANI concept, like VUCA, underscores the need for individuals, organizations, and societies to adapt to an environment characterized by rapid change, uncertainty, complexity, and ambiguity. It serves as a framework for acknowledging and addressing the challenges posed by the dynamic and unpredictable nature of contemporary global dynamics. Embracing flexibility, adaptability, and resilience becomes crucial in responding effectively to the characteristics of a BANI world.

When thinking about the future, we often overestimate the role of technology and underestimate where technology fits in a social context. While the future of work holds

⁷ Lynn, Th., Rosati P., Conway E. & van der Werff L. 2023. *Introducing the Future of Work: Key Trends, Concepts, Technologies and Avenues for Future Research*. In: Lynn, T., Rosati, P., Conway, E., van der Werff, L. (eds) *The Future of Work. Palgrave Studies in Digital Business & Enabling Technologies*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-31494-0_1

a pivotal position within industrial strategy, its significance transcends this specific domain. The European Union notably exemplifies this stance, with the Future of Work playing a prominent role not only in the revised *European Industrial Strategy* but also in the *European Pillar of Social Rights Action Plan* and in the *European Research Area's* policy agenda.

The European Commission specifically highlights the following aspects to the future of work: quality of jobs and employment; social protection and next-generation manufacturing; the intersection of health and employment; inclusive workplaces; reskilling and upskilling; human-machine collaboration.⁸ In this context, the current research on the future of work should also focus on the following:

- workplace relations: well-being, job insecurity, mentoring;
- effects of workplace change: evolution of the workplace, telecommuting;
- diversity: workplace diversity, gender diversity, age discrimination;
- personal skills.⁹

To chart the future of work at the highest level, the McKinsey Global Institute examined prospective labor demands, the mix of occupations, and the necessary workforce skills for those roles. The analysis encompassed eight countries (China, France, Germany, India, Japan, Spain, the United Kingdom, and the United States) characterized by diverse economic and labor market models. These nations collectively represent nearly half of the world's population and contribute to over 60 percent of its GDP. Their main findings reveal the following trends:

- One in 16 workers may have to switch occupations by 2030.
- In about 60 percent of occupations, at least one-third of the constituent activities could be automated, implying substantial workplace transformations and changes for all workers (between 400 million and 800 million individuals could be displaced by automation).
- Job growth will be more concentrated in high-skill jobs (for example, in healthcare or science, technology, engineering, and math [STEM] fields), while middle- and low-skill jobs (such as food service, production work, or office support roles) will decline.

⁸ European Commission. *What is the future of work?* Available at: https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/future-work_en

⁹ Mitchell, R., Shen, Y., & Snell, L. 2022. The future of work: A systematic literature review. *Accounting and Finance*, 62(2), 2667–2686.

- Some types of jobs may be at risk: as grocery stores increasingly install self-checkout counters, there may be a need for fewer clerks, and robotics used to process routine paperwork may lessen demand for some office workers.
- Demand for technological, social and emotional, and higher cognitive skills will rise by 2030.¹⁰

Aside from automation, artificial intelligence, and robotics that have been reshaping many industries, the trials of natural disasters and accelerated climate change, aging population, serious cyber-attacks and geopolitical instability emphasize the need for flexibility, sustainability, security and strategic planning in the future of work.

Consequently, to navigate the 21st century world of work, all organizations will be required to adopt new approaches and account for the balance of these three interdependent elements when shaping their future:

- **The nature of work.** Organizations should be able to answer two big questions clearly: How do we generate revenue? How does work get done? It will yield a coherent framework of organizational priorities and determining the facilitators to realize the strategic vision.
- **The workforce of the future.** In any organization, the workforce represents its most invaluable asset. Preparing for the future necessitates a thorough understanding of the current workforce as well as an insight into the workforce that will be required. This dual perspective can showcase areas where there exists either an overabundance or a dearth of talent, enabling proactive measures to address potential talent shortages before they transform into a competitive vulnerability.
- **The workplace of the future.** The concept of the workplace comprises a fusion of physical settings and established organizational norms and methodologies. Technological advances have introduced a paradigm shift here towards flexible long-term remote or hybrid models. Hybrid work set-ups, where some work happens on-site and some remotely, are likely to persist.¹¹

To add to the third element, the formats of co-working and shared working are becoming more and more widespread. Co-working refers to the co-localisation of a

¹⁰ *The future of work after COVID-19*. February 2021. McKinsey Global Institute Report. Available at: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>

¹¹ Shaninger, B., Sharma K. 2021. *The future of work: Balancing three symbiotic elements*. Available at: <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-organization-blog/the-future-of-work-what-next>

group of individuals with more or less heterogeneous backgrounds in the same work environment, as co-working spaces involve three primary concepts: telecentres, serviced offices and co-working spaces.¹² Shared working is an employment arrangement where two people, or sometimes more, are retained on a part-time or reduced-time basis to perform a job normally fulfilled by one person working full-time.

The McKinsey Global Institute's discussion paper *Skill Shift Automation and the Future of the Workforce* states that more work will be done by freelancers and other contractors, a shift that will boost the emerging "gig" or "sharing" economy, as 61 percent of respondents expect to hire more temporary employees.¹³ In general, this study indicates a significant shift in organizations across five key domains: mind-set, organizational setup, work-activity allocation, workforce composition, and the understanding and functions of C-suite and HR roles.¹⁴

Within this broader context, the so-called present-day "Great Reassessment" reflects a significant shift in employee priorities, which is observed in various organizations and industries. Companies are being challenged to reconsider the employee experience and undergo a transformation in how they approach change. Consequently, several trends have surfaced, including:

- **Change by design:** Organizations should transition from standard input and activity measurements ("speeds and feeds") to an experience-based outcome focus.
- **Change by evidence:** The new world of change is bringing together analytics and behavioral science so that the interventions designed to nurture new organizational structures, attitudes, and mindsets are based on the analytical insight of the "system" that is being created
- **Change by leadership:** The new skills for leaders, if they are to shape the "architecture for change," will likely be about design thinking, storytelling, and political nous all approaches based on empathetic listening.¹⁵

¹² Kojo, I. and Nenonen, S. 2016. Typologies for co-working spaces in Finland – what and how? *Facilities*. Vol. 34, No. 5-6.

¹³ *Skill Shift: Automation and the Future of the Workforce: Overview*. Available at:

<https://www.mckinsey.com/featured-insights/future-of-work/skill-shift-automation-and-the-future-of-the-workforce>

¹⁴ McKinsey Discussion Paper: *Skill Shift: Automation and the Future of the Workforce*. Available at:

<https://www.mckinsey.com/~media/mckinsey/industries/public%20and%20social%20sector/our%20insights/skill%20shift%20automation%20and%20the%20future%20of%20the%20workforce/mgi-skill-shift-automation-and-future-of-the-workforce-may-2018.pdf>

¹⁵ *Key trends shaping the future of change management*. Available at:

<https://kpmg.com/si/en/home/insights/2022/07/three-trends-shaping-the-future-of-change-management.html>

The way companies guide their organization through the “Great Reassessment” can have a long-term impact. The 2023 Australian Financial Review Workforce Summit also reaffirmed the idea that the modern 21st century workforce will need to be something truly different from the past, with changes in the way organizations organize, select, develop and lead their people. This approach is based on five pillars:

- The modern organization must be **less hierarchical** than the past; more a ‘team of teams’;
- Teams will have **hybrid intelligences** – technology and human;
- People will be recruited and mentored **for their potential**, tapping diverse and perhaps unfamiliar pools of labor;
- The culture will encourage **continual development and learning**, where leaders and individuals are working in the ‘stretch zone’;
- An execution and **outcomes focus** will enable an organization to thrive in a fast-paced, uncertain world.¹⁶

Therefore, the organizational management can build strength in the future of work by centering on the following:

- **Expand executives’ focus on strategic clarity, coaching, and empathy.** The leading driver of performance and productivity is not compensation or stretch goals but rather the sense of purpose work provides to employees.
- **Foster outcome-based management of small, cross-functional teams.** This is both more human and more effective as performance management practices shift from being about controlling employees’ work to empowering and enabling teams and people to perform.
- **Increase talent velocity, especially with reskilling.** Being able to staff teams across organizational siloes is a hallmark of agile models. Moving in this direction for talent management might entail developing internal talent marketplaces or hubs for talent redeployment that make it easier for people to discover potential projects. It will also involve reskilling and upskilling people more quickly than in the past, leaning on formal training, as well as mentoring.

¹⁶ *The future of work - a new era*: Reflections on the 2023 Australian Financial Review Workforce Summit, presented by McKinsey & Company. Available at: <https://www.mckinsey.com/au/our-insights/australia-and-new-zealand-perspectives/the-future-of-work-a-new-era>

- **Find new zero-cost, high-optionality ways to collaborate.** It can help to define a model to increase how quickly your organization can discover and adopt better models of collaboration, both physical and digital. Designing these interactions, communicating expectations, and working norms could enhance the collaboration.
- **Increase the rate of technology adoption.** It is imperative for companies to seek out new tech and use data to drive optimal results and make better decisions.¹⁷

As one can observe, the organizational future requires not only a re-imagination of work but education, social protection, regulations and the role of institutions in the design and safeguarding the Future of Work.

1.2. The Skills for/of the Future

In the future, employees will allocate a greater portion of their time to tasks that machines are less proficient in, including people management, the application of expertise, and interpersonal communication. Conversely, they will dedicate less time to predictable physical tasks and data collection/processing, where machines already surpass human capabilities. This shift will demand a broader skill set, placing an emphasis on social and emotional skills and advanced cognitive abilities like logical reasoning and creativity.

Against this backdrop, the research initiative "Future Skills – The Future of Learning and Higher Education" was launched in 2015 under the direction of Ulf-Daniel Ehlers and Sarah A. Kellermann at the Baden Wuerttemberg-Cooperative State University in Karlsruhe, Germany. In the 2020 volume *Future of Skills - The Future of Learning and Higher Education*, Ulf-Daniel Ehlers underscored the significance of Future Skills and defined them as “the competences that allow individuals to solve complex problems in highly emergent contexts of action in a self-organized way and enable them to act (successfully).”¹⁸ He argues that Future skills are based on cognitive, motivational, volitional and social resources, are value-based and can be acquired in a learning process.¹⁹ He further emphasizes that Future Skills can be

¹⁷ *The future of work - a new era*: Reflections on the 2023 Australian Financial Review Workforce Summit, presented by McKinsey & Company. Available at:

<https://www.mckinsey.com/au/our-insights/australia-and-new-zealand-perspectives/the-future-of-work-a-new-era>

¹⁸ Ehlers, Ulf-Daniele. 2020. *Future Skills: The Future of Learning and Higher Education*. Available at: <https://nextskills.org/wp-content/uploads/2020/03/Future-Skills-The-Future-of-learning-and-higher-education.pdf>

¹⁹ Ehlers, Ulf-Daniele. 2020. *Future Skills: The Future of Learning and Higher Education*. Available at: <https://nextskills.org/wp-content/uploads/2020/03/Future-Skills-The-Future-of-learning-and-higher-education.pdf>

described by two cornerstone characteristics: a strong, transversal, and well-developed capacity for self-organization, coupled with the capacity to act in unpredictable contexts. These two elements thus advance to key components for professionalism – regardless of the respective professional field.²⁰

In the *Future of Jobs Survey 2023* by World Economic Forum, businesses share their expectations regarding the changing significance of skills for their workforce over the next five years (2023 – 2027). Creative thinking, analytical thinking, technological literacy, curiosity and lifelong learning, and resilience, flexibility and agility are identified as the first five skills increasing in importance.²¹ Cognitive skills are recognized for undergoing the swiftest surge in significance, highlighting the increasing relevance of complex problem-solving in the professional environment. For the first time in this edition, ethical skills have made their debut in the 2023 report's skills taxonomy. A notable 68% of companies express the belief that the increasing vocalization of consumers on social and environmental issues is either likely or highly likely to propel transformative changes within their organization over the next five years.²²

As skills are being disrupted, businesses are designing and scaling up their training programmes. Mid career retraining will become ever more important, while rethinking the transition support and safety nets for affected workers will become an ultimate challenge, as many workers will need assistance adjusting to work that is evolving at higher rates of change. Lifelong learning hence is a skill of the future because it equips individuals with the tools needed to operate in an ever-changing world, fostering adaptability, continuous skill development, and personal growth. It endeavors to establish a "learning economy," where the ongoing evolution of workers' skills remains in step with innovation.

In his 2022 book, *Future Skills: The 20 Skills and Competencies Everyone Needs to Succeed in a Digital World*, Bernard Marr discusses the imperative of comprehending how technology will shape our world for success in the digital era. This is the rationale behind his delineation of 20 essential skills, among them – digital and

²⁰ Ehlers, Ulf-Daniele. 2020. *Future Skills: The Future of Learning and Higher Education*. Available at: <https://nextskills.org/wp-content/uploads/2020/03/Future-Skills-The-Future-of-learning-and-higher-education.pdf>

²¹ *The Future of Jobs Report 2023*. World Economic Forum. Available at: <https://www.weforum.org/publications/the-future-of-jobs-report-2023/in-full/4-skills-outlook/#4-skills-outlook>

²² *The Future of Jobs Report 2023*. World Economic Forum. Available at: <https://www.weforum.org/publications/the-future-of-jobs-report-2023/in-full/4-skills-outlook/#4-skills-outlook>

data literacy, critical thinking, judgment and complex decision-making, cultural intelligence and diversity consciousness, interpersonal communication, ethical awareness, brand of “You” and networking, adaptability and flexibility etc.²³

Aligned with the principles of the *NextSkills* project's design, Ulf-Daniel Ehlers further contributes to our understanding of future skills that he divides into the three competence fields of the so-called Triple Helix-Model, with a total of 17 skills. The framework is based on three interacting dimensions that represent the aforementioned competence fields:

- **Subject-related Future Skills** concern the developmental capability of one's own personal and individual competences. They include *learning literacy, self-efficacy, self-determination, self-competence, reflective competence, decision competence, initiative and performance competence, ambiguity competence* and *ethical competence*.
- **Object-related Future Skills** are associated with the handling of specific objects, work tasks, and problems. They encompass *design-thinking competence, innovation competence, systems competence* and *digital literacy*.
- **Organization-related Future Skills** are linked to managing the social, organizational, and institutional environment: *communication competence, cooperation competence, self-determination, future and design competence, sensemaking*.²⁴

These three domains of competences are interrelated and encapsulate the paramount 17 future skills, as illustrated in the skills interactive map below:

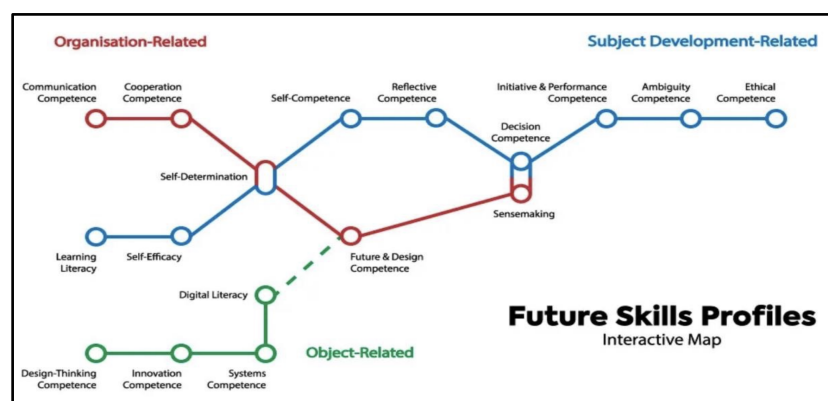


Table 1. Future Skills Map²⁵ (Image Credit²⁶)

²³ Marr, Bernard. 2022. *Future Skills: The 20 Skills and Competencies Everyone Needs to Succeed in a Digital World*. Wiley.

²⁴ Ehlers, Ulf-Daniele. 2020. *Future Skills: The Future of Learning and Higher Education*. Available at: <https://nextskills.org/wp-content/uploads/2020/03/Future-Skills-The-Future-of-learning-and-higher-education.pdf>

²⁵ Ibid.

²⁶ Ibid.

As seen in the graph, all three dimensions are interconnected and exert mutual influence. For instance, the competence of self-reflection not only impacts the subjective development of an individual in action but also influences their ability to communicate and cooperate within the social or organizational dimension. Conversely, it also contributes to the system competence of an individual within the object dimension.

In turn, McKinsey integrated its experience with academic research in adult training to delineate potential foundational skills. This process commenced by categorizing skills into four broad categories – cognitive, digital, interpersonal, and self-leadership – and further delved into identifying 13 distinct skill groups nested within these categories. Seeking greater precision, the study pinpointed 56 *distinct elements of talent* (DELTAs) that fall within these skill groups. Termed DELTAs to underscore their composite nature encompassing both skills and attitudes, these elements encapsulate traits such as “adaptability” and “coping with uncertainty,” illustrating the synergy of skills and attitudes inherent in this talent framework.²⁷

Education has the potential to empower learners with agency and provide them with the necessary competencies to influence their own lives and make meaningful contributions to the lives of others. In pursuit of determining the most effective methods for achieving these outcomes, the Organisation for Economic Co-operation and Development (OECD) has initiated *The Future of Education and Skills 2030* project. This project aims to assist countries in addressing two pivotal questions:

- **What** knowledge, skills, attitudes, and values will be essential for today's students to not only survive but thrive and shape their world?
- **How** can instructional systems adeptly cultivate these knowledge, skills, attitudes, and values?

In their position paper²⁸, it has been concluded that future-ready students need to exercise agency, which implies “a sense of responsibility to participate in the world and, in so doing, to influence people, events and circumstances for the better.”²⁹ In

²⁷ Dondi M., Panier F. Schubert J. 2021. *Defining the skills citizens will need in the future world of work*. Available at: <https://www.mckinsey.com/industries/public-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work>

²⁸ *The Future of Education and Skills*. Education 2030. Available at: [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)

²⁹ *The Future of Education and Skills*. Education 2030. Available at: [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)

facilitating agency, educators need to not just acknowledge the individuality of learners but also recognize the broader network of relationships – with teachers, peers, families, and communities – that impact their learning. At the core of the learning framework lies the concept of “co-agency” – collaborative and mutually supportive relationships that guide learners in achieving their valued goals, where everyone as a learner, extending beyond students to include teachers, school managers, parents, and communities.

Building upon the foundation laid by the *OECD Key Competencies* established through the DeSeCo project (Definition and Selection of Competencies), the *OECD Education 2030 project* has introduced an additional set of competencies known as the “Transformative Competencies.” This framework responds to the increasing demand for young individuals to embody qualities of innovation, responsibility, and awareness and includes:

- **Creating New Value:** To prepare for 2030, people should be able to think creatively, develop new products and services, new jobs, new processes and methods, new ways of thinking and living, new enterprises, new sectors, new business models and new social models.
- **Reconciling Tensions and Dilemmas:** Young people will be required to be system thinkers, to think and act in a more integrated way, taking into account the interconnections and inter-relations between contradictory or incompatible ideas, logics and positions, from both short- and long-term perspectives: for example, balancing equity and freedom, autonomy and community, innovation and continuity, and efficiency and the democratic process.
- **Taking Responsibility:** Having the capacity to consider the future consequences of one’s actions, to evaluate risk and reward, and to accept accountability for the products of one’s work is central to this competency, which centers around the concept of self-regulation.³⁰

In the UNESCO 2021 Report *Reimagining our futures together: a new social contract for education*, it is emphasized that the teaching of skills should be first and foremost anchored in social, economic, and environmental justice.³¹ In other words, understanding the context in which skills are being developed and what they are being developed for is vital. And it is through education that the future can be shaped rather

³⁰ *The Future of Education and Skills. Education 2030.* Available at: [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)

³¹ *Reimagining our futures together: a new social contract for education.* UNESCO’s Future of Education Report. Available at: <https://reliefweb.int/report/world/reimagining-our-futures-together-new-social-contract-education>

than merely reacted to. Therefore, the skills selected to be taught to young people can become a central part of the world.

1.3. Envisioning the University of the Future

In formulating an evolving and forward-looking vision for higher education institutions, national, European, and international policymakers, along with education specialists, have proposed the concept of the “university of the future.”³² This vision is characterized by universities evolving through digital transformation, embracing lifelong learning, fostering interdisciplinary programs, engaging in global collaborations, prioritizing future skills development, implementing innovative teaching methods, emphasizing student well-being, and incorporating environmental sustainability practices.

Notably, funded with support from the European Commission, *Universities of the Future* (588409-EPP-1-2017-1-PT-EPPKA2-KA), a Knowledge Alliance Project, brought together actors from the quadruple helix (businesses, universities, public authorities and students) to address the existing gap in the current offer in Higher Education in Finland, Poland, and Portugal and co-create innovative and multidisciplinary solutions adjusted to the current and upcoming challenges of a digital era.³³ One of its objectives was to set up an online hub that fosters direct contact between all key players and encourages debate. In the designed *Blueprint for the Universities of the Future* under the project, a strong emphasis is placed on fostering a close link between industry and academia. Future universities will be places where university and industry are co-located and collaborate on projects that solve real-world problems. It also highlights that by 2040 the practice of upskilling employees in collaboration with Higher Education Institutions (HEIs) should evolve into a fundamental industry norm that entails recognizing the significance of providing robust self-development opportunities.³⁴

Back in the late 1990s, Peter Schwartz's *Art of the Long View: Planning for the future in an uncertain world* explored strategic foresight as a crucial aspect of navigating uncertainty.³⁵ In 1998, Clark introduced the concept of the *entrepreneurial*

³² See: <https://eua.eu/issues/28:universities-of-the-future.html>

³³ *Universities of the Future* (Erasmus Project). Available at: <https://universitiesofthefuture.eu/background/>

³⁴ *Blueprint for the Universities of the Future*. Available at: https://universitiesofthefuture.eu/wp-content/uploads/2021/08/UoF_blueprint_230721_reviewed.pdf

³⁵ Schwartz, P. 1998. *Art of the Long View: Planning for the future in an uncertain world*. John Wiley & Sons.

university in his study titled *Creating Entrepreneurial Universities: An Organizational Path of Transformation*. This term characterizes a university that proactively undergoes structural and cultural changes, fortifying its management core through initiatives such as curriculum enhancements and program development. The juxtaposition of Schwartz's insights and Clark's conceptualization highlights the imperative for universities to strategically plan for the future and adapt to the evolving landscape of higher education. It seems that the concept of the “entrepreneurial university” has been adopted as a worldwide phenomenon, following a similar developmental path despite diverse initial conditions and expressions.

Today, universities are assigned a “third mission”,³⁶ the broader set of societal roles and responsibilities that universities undertake beyond traditional teaching and research functions. It reflects the idea that universities should be global public agents actively engaged in addressing real-world challenges and making a positive impact beyond academia. In this line of reasoning, the European Universities Association (EUA) has initiated a project dedicated to *Universities and the future of Europe* (UniFE). Under the umbrella of UniFE, the Association is engaging in an in-depth consultation process with its membership to develop concrete ideas about what Europe’s universities want from future collaboration and what they need in terms of framework conditions, political structures and multilateral frameworks. It marks the subsequent stage for EUA following the formulation of the comprehensive framework document *Universities without Walls – A Vision for 2030*, which has outlined the following³⁷:

- The future of Europe’s universities will be **transnational**. International cooperation will continue to provide a prerequisite for high quality research and innovation, as well as learning and teaching. Universities are showcases for peaceful and constructive European and international cooperation. They also

³⁶ Compagnucci, Lorenzo, Spigarelli, Francesca. 2020. The Third Mission of the university: A systematic literature review on potentials and constraints. *Technological Forecasting and Social Change*, Vol. 161. DOI: <https://doi.org/10.1016/j.techfore.2020.120284>

³⁷ EUA: *University without Walls: A Vision for the Future*, February 2021. Available at: <https://eua.eu/downloads/publications/universities%20without%20walls%20a%20vision%20for%202030.pdf>

nurture a positive and reflective attitude towards a European identity, in addition to global, national and regional ones, and will do so in the future.

- In 2030, universities across Europe will enjoy high levels of **autonomy** and have the capacity to make strategic choices about organizational, financial, staffing and academic matters. The **university community**, including all types of learners and staff, will **co-create** the future of the university together with the institutional leadership.
- Universities are **accountable to stakeholders** and **society at large**. Accountability will be ensured through appropriate governance and continuous exchange with policy makers, civil society, citizens, business and industry and other societal groups, through various university activities.
- Universities will put their missions into **the service of sustainability**, evaluating and being accountable for the appropriate adjustment of principles and values, as well as policies and activities. This will require a careful balance between funding of strategic research priorities, retaining the freedom of the individual researchers and recognising the responsibility of universities in ensuring a broad knowledge base for society through curiosity-driven research.

Another project was a continuation of the *University of the Future* white paper from 2012 initiated by the representatives of Ernst & Young Australia, namely – a formal scenario planning process titled *Can the Universities of Today Lead Learning for Tomorrow? The University of the Future*.³⁸ Their primary objective was not to predict the future outright but to provide a spectrum of plausible "tomorrows," aimed to rigorously test new policies, strategies, and plans within the context of Australian universities. To collect real-world insights, extensive interviews and workshops involving over 50 university leaders, government policymakers, and industry observers were held along with surveys and focus groups comprising more than 3,000 students and employers. This multifaceted approach allowed gathering diverse perspectives and ensuring a comprehensive understanding of the challenges and opportunities shaping the future of higher education in Australia.

The study demonstrated that the future of Australia's universities will be shaped by two critical uncertainties: on the one hand, it is the shifting role of government, and

³⁸ *Can the Universities fo Today Lead Learning for Tomorrow? The University of the Future*. 2018. Available at: <https://cdn.ey.com/echannel/au/en/industries/government--public-sector/ey-university-of-the-future-2030/EY-university-of-the-future-2030.pdf>

on the other – evolving learner preferences. In this scope, the significance of the designated four – divergent yet plausible – future university scenarios is their capacity to assist HEIs in recognizing emerging trends, identifying potential opportunities and challenges, and assessing how well current strategies can adapt to evolving situations. Let us present a brief overview of these four scenarios:

- **Scenario No.1: Champion University.** A proactive government takes a hands-on approach in championing universities as strategic national assets. The majority of students opt for conventional undergraduate and graduate degree programs. To enhance efficiency, universities undertake operational streamlining through the transformation of service delivery and administrative processes.
- **Scenario No. 2: Commercial University.** A laissez-faire government necessitates financial independence for universities, alleviating national budget constraints. Students show a preference for degree programs with work-integrated learning opportunities. In response, universities strategically reposition themselves by forging closer collaborations with industry for joint initiatives in teaching and research.
- **Scenario No. 3: Disruptor University.** A hands-off government initiates sector deregulation to stimulate competition and efficiency. The influence of continuous learners seeking on-demand micro-certificates becomes predominant amidst technological disruptions in the workplace. In response, universities diversify into new markets and services, engaging in competition with a variety of emerging local and global educational service providers.
- **Scenario No. 4: Virtual University.** An activist government restructures the tertiary sector to integrate universities and vocational institutes, prioritising training and employability outcomes as humans begin to be replaced by machines. Continuous learners are the majority, preferring unbundled courses delivered flexibly and online. Universities restructure into networks that share digital platforms.³⁹

The study concluded that the commercial and the disruptor university scenarios are the most likely to become reality. Both will necessitate leaders to concurrently reposition their institutions by aligning with industry and exploring disruptive new

³⁹ *Can the Universities fo Today Lead Learning for Tomorrow? The University of the Future.* 2018. Available at: <https://cdn.ey.com/echannel/au/en/industries/government--public-sector/ey-university-of-the-future-2030/EY-university-of-the-future-2030.pdf>

business models to counter new market entrants. With this in mind, the project suggested that universities should consider the potential to:

- embark on double transformation to optimize and grow;
- make the shift from being faculty-focused to learner-centric;
- integrate with industry to co-create and collaborate;
- re-imagine the physical campus for the digital world;
- unbundle degree programs and the university value chain.⁴⁰

What is important is that in the evolving landscape of education, there is and will be a growing call for “lifelong educational wellbeing” comparable to the emphasis on general health and financial wellbeing. This surge in demand is driven by heightened concerns surrounding job uncertainty and the impact of automation. In response to this shift, universities will position themselves as vital partners in educational wellbeing. Their role extends to delivering tailored, and in some instances, personalized education services.

In conclusion, universities of the future are to play a transformative role in the ever-evolving landscape of education, adapting to technological advancements and addressing the dynamic needs of learners. As the educational paradigm shifts, universities of the future will serve as crucibles for lifelong learning, equipping individuals with the skills and adaptability required to thrive in diverse and complex environments, thus shaping a more inclusive, sustainable, and globally connected society.

⁴⁰ *Can the Universities fo Today Lead Learning for Tomorrow? The University of the Future*. 2018. Available at: <https://cdn.ey.com/echannel/au/en/industries/government--public-sector/ey-university-of-the-future-2030/EY-university-of-the-future-2030.pdf>

CHAPTER 2.

Dual Education: A Win-Win Partnership between Universities and Industry

2.1. Conceptualizing Dual Education

In today's world, the boundaries between academia and industry are gradually blurring as both sectors recognize the benefits of collaboration and knowledge exchange. Research findings emphasize that the attributes of traditional education and instructional approaches do not always guarantee that higher education alone equips individuals with a solid foundation for entering the labor market or guarantees a successful career (Teichler 2011)⁴¹. Challenges related to graduates' employability often arise due to disparities in the quality and quantity of interactions between universities and businesses. (Rostan and Stan 2017)⁴². In response to this, a new paradigm has given rise to tertiary-level education which combines theoretical learning at universities with practical training in the real-world setting of industries.

Dual education, also referred to as **work-integrated learning** or **cooperative education**, goes beyond the conventional classroom setting by immersing students in authentic work environments, providing them with hands-on experiences and industry-relevant skills, as well as fostering a symbiotic relationship between universities and industry. It is designed to facilitate the acquisition of job-related competencies that ultimately contribute to achieving high-quality performance.⁴³ Thus, it suggests a collaborative teaching effort between two entities: educational institutions, such as universities, and businesses, aimed at preparing students for specific professions.

Work-integrated learning encompasses a multifaceted combination of formal, non-formal, and informal learning methods.⁴⁴ The workplace being the primary learning environment is a fundamental aspect, setting it apart from other forms of employment where the primary objective is often job performance rather than learning.

⁴¹ Teichler, U. 2011. Chapter Frombook the Flexible Professional in the Knowledge Society: New Challenges for Higher Education. In *International Dimensions of Higher Education and Graduate Employment*, 177–197. Springer

⁴² Rostan, M., and A. Stan. 2017. Italian Graduates' Employability in Times of Economic Crisis: Overview, Problems and Possible Solutions. *Sociológico Série II.*: 37–52.

⁴³ Streumer, J. 2010. De kracht van werkplekleren. In J. Streumer (Ed.), *Werkplekleren, het medicijn voor alle kwalen?* (pp. 37–40). Lemma

⁴⁴ Tynjälä, P. 2013. Perspectives into learning at the workplace. *Educational Research Review*, 3, 130–154. <https://doi.org/10.1016/j.edurev.2007.12.001>

This approach assumes that learners acquire work-related competencies both implicitly and explicitly as they engage in their work duties.⁴⁵

In the conventional educational system, recent graduates typically aim to establish themselves in the job market transitioning from tertiary education⁴⁶. This shift signals the end of educational stability and the beginning of a period of uncertainty and dynamism. In the dual model of education, students are integrated into the production process as employees of enterprises from the outset of their learning journey. This approach emphasizes the active involvement of businesses in the training process, which often entails a substantial financial investment on their part for employee development. However, they willingly commit to this expenditure because they recognize that investing in high-quality education represents a sound capital investment. Moreover, businesses have a vested interest not only in the outcomes of the learning process but also in the curriculum itself and its organizational aspects.⁴⁷ Dual education not only facilitates the acquisition of essential skills demanded by the labor market for students but also enables the state to strike a crucial balance in cultivating a diverse workforce across various professions.⁴⁸ Thus, establishing a harmonious relationship between higher education and the requirements of the labor market not only guarantees a high level of proficiency among graduates and cost savings for companies but also enhances the employability of emerging professionals, rendering them more competitive within the job market.

Lave and Wenger⁴⁹ argue that learning is not merely the transmission of abstract knowledge between individuals but a collaborative social process. They emphasize that this form of learning is context-specific, deeply intertwined with the social and physical environment. Knowledge, in this view, is a valuable skill acquired by participating in a community where members possess that skill and are willing to

⁴⁵ Kyndt, E., Endedijk, M., & Beusaert, S. 2021. Werkplekleren faciliteren: De rol van de organisatie. [facilitating workplace learning: The role of the organisation.]. In J. W. M. Kessels & R. F. Poell (Eds.), *Handboek human resource development. Organiseren van het leren [Handbook of human resource development. Organising learning]* (pp. 233–250). LannooCampus.

⁴⁶ Donald, W. E., J. A. Melanie, and Y. Baruch. 2018. Students' Perceptions of Education and Employability: Facilitating Career Transition from Higher Education into the Labor Market. *Career Development International* 23 (5): 513–540. doi:10.1108/CDI-09-2017- 0171

⁴⁷ Afanasieva, O.K. and Shakhova, O. 2021. DUAL EDUCATION AS A WAY TO SOLVE MODERN PROBLEMS OF UKRAINIAN HIGHER EDUCATIONAL INSTITUTIONS, *Development of Management and Entrepreneurship Methods on Transport* (ONMU), 76(3), pp. 104–114. Available at: <https://doi.org/10.31375/2226-1915-2021-3-104-114>.

⁴⁸ Pominchuk, S.H. 2019. Professional orientation in the system of introduction of the dual form of education. *Young Scientist*, 8(72), 339-344. doi: 10.32839/23045809/201987271

⁴⁹ Lave, J. – Wenger, E.: *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press, New York, (1991) <https://doi.org/10.1017/CBO9780511815355>

mentor the learner. Through observation and practice, students progress from the periphery to the core of the community of practice.

While most conventional education systems equip graduates with the cognitive skills required for entering the workforce, it is the cultivation of non-cognitive skills (otherwise 'soft skills'⁵⁰) such as critical thinking, communication skills, and collaboration that truly enhances graduates' potential in the labor market⁵¹. The increasing demand for these skills can be attributed to the limitations of digital devices and AI in simulating human interaction and comprehending the social environment^{52, 53}. Work-based learning plays a pivotal role in nurturing these non-cognitive abilities, as it provides hands-on experience, fosters active participation in the work environment, and encourages communication with colleagues⁵⁴.

On the whole, international experiences confirm the effectiveness of dual training programs⁵⁵. An obvious advantage for **students** is that dual education enhances students' employability and readiness for the workforce. By engaging directly with industry professionals, students gain practical insights into the latest trends, technologies, and challenges within their chosen fields. This exposure enables them to develop a deeper understanding of the industry's requirements, thereby equipping them with the skills and knowledge sought after by employers. Consequently, graduates of dual education programs are better prepared to transition into the workplace, reducing the skills gap and enhancing overall workforce productivity. This approach enables students to translate their theoretical knowledge into practical skills, equipping them to enter the job market as highly competitive candidates, thereby

⁵⁰ Heckman, J. J., J. E. Humphries, and T. Kautz. 2014. *The Myth of Achievement Tests: The GED and the Role of Character in American Life*. Chicago: University of Chicago Press

⁵¹ Pogátsnik, M. 2019. The Impact of Dual Higher Education on the Development of Non-Cognitive Skills. In *Search of Excellence in Higher Education*, edited by G. Kováts and Z. Rónay, 179–190. Budapest:Magyarország.

⁵² Autor, D. H., F. Levy, and R. J. Murnane. 2003. The Skill Content of Recent Technological Change: An Empirical Exploration. *The Quarterly Journal of Economics* 118 (4): 1279–1333.

⁵³ Deming, D. J. 2015. The Growing Importance of Social Skills in the Labor Market. *Quarterly Journal of Economics* 132 (4) :1593-1640.

⁵⁴ Khine, M. S., and S. Areepattamannil. 2016. *Non-cognitive Skills and Factors in Educational Attainment*. Rotterdam: Sense Publishers.

⁵⁵ Melin, G. et al. 2016. *Towards a future proof system for higher education and research in Finland*. Publications of the Ministry of Education and Culture, Finland, 2015; Kovacs, Zs., Török, E. (2016): *Dual System for Renewing Hungarian Higher Education*. International Journal of Education and Learning Systems, vol. 1, pp. 81-85.; Yu, L. (2012): Research on the Cooperative Education Model Cultivating In Higher Vocational Education. *Education and Management Engineering*, vol. 1, pp. 35-41.

eliminating the need for additional years of training and the associated financial burdens⁵⁶.

Similarly, dual education is beneficial to **universities** in a variety of ways. It enables academic institutions to align their curricula with industry needs, ensuring that the knowledge imparted to students remains relevant and up-to-date. Additionally, it provides universities with opportunities for research collaborations, innovation, and access to real-world data, which can enrich academic research and inform evidence-based teaching practices. Finally, dual education can contribute to the reputation and ranking of universities by showcasing their commitment to producing work-ready graduates who can make immediate contributions to the economy.

Last but not least, **industries** also benefit from educational collaborations with universities. Primarily, dual education helps companies to shape the future workforce according to their specific requirements. They can identify and nurture talented individuals who may later become valuable assets to their organizations. Also, it offers industries access to a pool of fresh ideas, research findings, and emerging technologies that can drive innovation and improve competitiveness.

As shown above, dual education undeniably presents a multitude of advantages. However, it is imperative to acknowledge that this approach also comes with certain limitations that warrant thoughtful contemplation within the context of university-business collaboration. Firstly, this system allows students to specialize within a specific domain of a particular industry, thereby increasing their employment opportunities. Nevertheless, it can constrict their choices regarding alternative careers or employment changes should they opt not to join the company where they completed their dual studies.

Furthermore, profit-driven companies naturally strive to select employees meticulously, which leads them to support the education of a relatively large number of students. This presents an enticing opportunity for participants in this educational model. However, upon finishing their studies, the stark reality often emerges that only a select few, typically the highest achievers, are extended offers for positions within the company. Consequently, the majority of students find themselves compelled to

⁵⁶ Pogatsnik, M. 2018. Dual Education: The Win-Win Model of Collaboration between Universities and Industry, *International Journal of Engineering Pedagogy*, 8(3), pp. 145–152. Available at: <https://doi.org/10.3991/ijep.v8i3.8111>

search for jobs in different industries where their experience may have limited applicability, resulting in additional stress during their job search. (Szarka 2016)⁵⁷.

2.2. Evolution of Work-Integrated Learning:

The *Berufsakademie Model* in Germany

Germany introduced the University of Cooperative Education, also known as *Berufsakademie*, as an innovative work-integrated learning model in higher education. Its purpose was to extend the traditional German system of dual vocational training to the tertiary level. In 1972, a collaborative effort involving three global companies - Bosch, Daimler Benz (now Daimler-Chrysler), and Standard Elektrik Lorenz (SEL) - was initiated to develop a dual education system and apply the principles of vocational training to business and engineering fields at the university level. This initiative arose from the need for highly skilled individuals, as research universities were perceived to be incapable of meeting the demand. (Göhringer 2002).⁵⁸

In 1974, the state of Baden-Württemberg, renowned for its economic success within the Federal Republic of Germany, initiated a groundbreaking endeavor by establishing the *Berufsakademie*, a state-run educational institution. This new institution introduced study programs encompassing various disciplines, including Business Administration, Engineering, and Social Work. At the *Berufsakademie*, students assume dual roles as both learners and employees, engaging in alternating periods of university coursework and practical on-the-job training. Typically, each work period spans 12 weeks, and every term comprises a practical component alongside a theoretical component.

One of the fundamental aspects of the *Berufsakademie* model is that students hold an employment contract with one of the partner companies or enterprises associated with the institution. This feature distinguishes the model and holds significant importance. Instead of being enrolled directly at the *Berufsakademie*, the student becomes a registered employee at the partner company, following a successful interview process for employment. A standard training contract is a prerequisite for enrollment, ensuring a formal commitment. Throughout the entire

⁵⁷ Szarka, A. V. 2016. Dual education and industrial cooperation in electrical engineering. *Journal of Physics: Conference Series*, Vol. 772, No. 1. IOP Publishing. doi:10.1088/1742-6596/772/1/012053

⁵⁸ Göhringer, A. 2002. University of cooperative education–karlsruhe: the dual system of higher education in Germany. *Asia-Pacific Journal of Cooperative Education*, 2002, 3 (2), 53-58.

course, the Berufsakademie student receives remuneration, which emphasizes the financial investment required from the employer. Consequently, hosting a Berufsakademie student can be financially demanding, necessitating profitability. However, the relationship between the company and the university is one of equal partnership, wherein the company assumes a continuous and influential role in shaping the organizational structure and curriculum of the learning institution.

CHAPTER 3.

European Policy Frameworks for Intercultural Education

3.1. Intercultural education: What is in the Name?

Over the past few decades, the European Union has emerged as a significant supranational entity in the field of education, with educational matters transitioning from a minor consideration to a central focus (Dale & Robertson, 2009)⁵⁹. While there have been many joint efforts of EU institutions and the Council of Europe to emphasize the importance of an intercultural dimension in response to growing diversity, it is important to note that individual EU member states retain substantial autonomy in the field of education.

Given the inherent ambiguity in the semantic definitions and epistemological formulations surrounding the term "intercultural education," it is essential to provide a comprehensive explanation of this concept and its evolutionary trajectory. To illustrate, Germany, Greece, and Ireland lean towards the use of the terms interculturalism and intercultural education, whereas Britain, the Netherlands, Canada, the United States, and Malaysia have traditionally embraced the concept of multiculturalism (Faas, 2010)⁶⁰.

Recent years have witnessed a gradual transition from multicultural to intercultural education within European education policies. Scholars and policymakers widely recognize intercultural education as fundamental to fostering citizenship, democracy, and societal cohesion. Consequently, both individual countries and international institutions have embraced this concept as a cornerstone for shaping their policies.

The strategy of multicultural pedagogy was officially endorsed by the Council of Europe in the 1970s. However, the true era of development for multicultural education in Europe commenced in the 1980s when a significant number of immigrant families chose to settle permanently in host countries, leading to an augmented presence of multiethnic and multicultural communities across European societies (Puzic, 1999)⁶¹. It was assumed that education could play a pivotal role in determining the success of

⁵⁹ Dale, R. & Robertson, S. 2009. *Globalisation and Europeanisation in education*, Oxford, Symposium Books.

⁶⁰ Faas, D. 2010. *Negotiating political identities: Multiethnic schools and youth in Europe*, Farnham, Ashgate.

⁶¹ Puzic S. 2007. Intercultural education in the European context: analysis of the selected European curricula. *Metodica*, 15, 2008, pp. 390-407.

immigrants in their new lives, necessitating specialized support encompassing cultural, educational, and individual social and health aspects. Consequently, a "double track strategy" was formulated to facilitate the integration of these children within host country schools while simultaneously maintaining cultural and linguistic ties to their countries of origin (Portera, 2008)⁶².

Nevertheless, these compensatory programs quickly attracted criticism due to their potential to foster segregation and stigmatization. Instead of addressing educational gaps and safeguarding the preservation of immigrants' cultural identities, these programs tended to categorize immigrant children as distinct groups with unique needs (Puzic, 2007). This critique of the "pedagogy for foreigners" and its deficit-based approach paved the way for the gradual development of the concept of "intercultural education."

It was not until the 1990s that the growing importance of intercultural learning started to be reflected in official discourses and political legislations in Europe. This shift was motivated by the policies advocated by leading international organizations such as UNESCO, the World Bank Institute, and the OECD. The Council of Europe has formulated and endorsed numerous recommendations with the objective of promoting and implementing intercultural education within its member states.

In 2002, the Council of Europe published a document titled "The New Challenges of Intercultural Education: Religious Diversity and Dialogue in Europe," which focused on the incorporation of religious diversity within intercultural education (Council of Europe, 2002)⁶³. The Final Declaration of the 21st session of the Standing Conference of European Ministers of Education also placed significant emphasis on intercultural education. The Declaration committed member states to actively promoting effective intercultural education and further emphasized the need for renewed conceptual research in the field of intercultural education (Athens Declaration, 2003)⁶⁴.

In 2005, the Commission of the European Communities published the "Recommendation of the European Parliament and of the Council on key

⁶² Portera A. 2008. Intercultural education in Europe: epistemological and semantic aspects, in "*Intercultural Education*", XIX, 6, pp. 481-491.

⁶³ Council of Europe. 2002. *The New Challenges of IE: Religious Diversity and Dialogue in Europe*, Strasbourg, Council of Europe.

⁶⁴ Athens Declaration 2003: :

http://www.coe.int/T/E/Cultural_Co-operation/education/Standing_conferences/e.21stsessionathens2003.asp#TopOfPage

competences for lifelong learning."⁶⁵ Within this recommendation, intercultural and civic competences were defined as the knowledge and skills necessary to actively engage in societies characterized by growing diversity, and to effectively address and resolve conflicts when needed.

The final shift from multiculturalism to interculturalism was underscored in two significant publications: the UNESCO "World Report on Cultural Diversity"⁶⁶ and the Council of Europe "White Paper on Intercultural Dialogue,"⁶⁷ both released in 2008. These reports highlighted the necessity of transitioning from a purely multicultural approach to a more comprehensive intercultural perspective.

Regarding the semantics of these two terms and their definitions, no consensus has been reached. Multicultural education and intercultural education are frequently employed interchangeably.⁶⁸ These two approaches converge in their shared mission to foster intercultural understanding, which stands as the primary goal of both educational frameworks. Furthermore, they share common learning objectives, including the mitigation of ethnocentrism, the promotion of language acquisition, and the cultivation of empathy towards diverse cultures.⁶⁹

The distinction in terminology appears to be largely influenced by geography. In Europe, the preferred term is intercultural education, whereas in the United States, as well as in North America, Australia, and Asia, the term multicultural education is more commonly used. However, even within Europe, there are variations between countries. For instance, Sweden and the Netherlands primarily employ the term intercultural education, while Great Britain and Finland tend to favor the term multicultural education.

According to UNESCO, intercultural education is characterized as a dynamic and interaction-oriented concept, while multicultural education primarily pertains to acknowledging cultural diversity within the classroom (Zilliacus, Holm, 2009)⁷⁰. Over

⁶⁵ Commission of the European Communities (2005), *Recommendation of the European Parliament and of the Council on key competences*. Available at: [www.europarl.europa.eu/...com\(2005\)0548_/com_com](http://www.europarl.europa.eu/...com(2005)0548_/com_com)

⁶⁶ UNESCO. 2008. *The 2nd UNESCO world report in cultural diversity: investing in cultural diversity and intercultural dialogue*. Available at: <http://www.unesco.org/new/en/resources/report/the-unesco-worldreport-on-cultural-diversity/>

⁶⁷ Available at: <https://en.unesco.org/creativity/policy-monitoring-platform/year-cultural-diversity-2008>

⁶⁸ Nieto S. 2006. Solidarity, courage and heart: what teacher educators can learn from a new generation of teachers. *Intercultural Education*, 17, pp. 457-473.

⁶⁹ Hill I. 2007. Multicultural and International Education: Never the Twain Shall Meet? *International Review of Education*, LIII, 3, pp. 245-264.

⁷⁰ Zilliacus H., Holm G. 2009. *Intercultural Education and Multicultural Education: The Same or Different?*, Conference ECER. Available at <http://www.eera-ecer.de/ecerprogrammes/conference/21/contribution/39040/>

the past decade, the term “intercultural education” has been widely used in official documents by EU authorities. For instance, the European Commission's document titled *Education Policies to Foster Tolerance in Children and Young People in the EU* (2016)⁷¹ explains that while some public discussions have criticized multicultural education for promoting division and parallel systems, most academics do not endorse such interpretations. Consequently, the document predominantly employs the term “intercultural education.”

3.2. Institutionalization of Intercultural Education

The past decades has been a critical period for intercultural education (IE), characterized by increased attention from global authorities. This heightened focus has resulted in the development of joint recommendations, declarations, and frameworks by organizations like UNESCO, policy briefs, reports, and cross-national surveys by bodies such as the OECD, as well as communications, conclusions, and resolutions from the EU. A significant milestone in 2006 was the release of UNESCO's *Guidelines on Intercultural Education*,⁷² which outlined key principles that serve as a framework for international efforts in the field of intercultural education. These guidelines emphasized the importance of active and inclusive participation of all learners in fostering understanding and solidarity among individuals, as well as ethnic, social, cultural, and religious groups, both within nations and on a global scale.

In 2008, the Council of Europe designated it as the “Year of Intercultural Dialogue.” During this period, the Council of Europe released the White Paper on Intercultural Dialogue: Living Together as Equals in Dignity, which emphasized the significance of intercultural competence as a vital capability that every individual should develop to actively engage in intercultural dialogue. The Platform of Intercultural Dialogue subsequently produced the Rainbow Paper, which served as a fundamental reference for intercultural education (IE) in Europe. Education, as the primary platform, plays a crucial role in fostering and practicing intercultural dialogue. This includes formal, non-formal, and informal educational settings, all of which should contribute to the promotion of intercultural dialogue. It is essential to facilitate intercultural learning at every age group (Council of Europe, 2008).

⁷¹ European Commission. 2016. *Education policies to foster tolerance in children/and young people in the EU*, Luxembourg, Publications Office of the European Union.

⁷² UNESCO. 2006. *UNESCO Guidelines for Intercultural Education*, Paris, UNESCO

In 2008, the European Commission initiated a discussion on how education policies can effectively respond to the challenges presented by immigration and internal mobility within the European Union. This was accomplished through the adoption of The Green Paper titled *Migration and Mobility: challenges and opportunities for EU education systems* (European Commission, 2008). The Green Paper outlined key issues that needed to be addressed, aiming to prevent the creation of segregated educational settings and enhance equity in education. These issues included accommodating the growing diversity of mother tongues and varied cultural perspectives, as well as developing intercultural competences. Additionally, the paper emphasized the importance of adapting teachers' skills and bridging the gaps between migrant families and communities.

The UNESCO World Report titled *Investing in Cultural Diversity and Intercultural Dialogue* (2009) emphasized the vital role of cultural literacy in today's interconnected world. In 2009, the Council of the European Union adopted *Council Conclusions on the Education of Children with Migrant Background*, which placed an obligation on Member States to provide free education to these children. This education should encompass teaching the official language or languages of the host country, as well as instruction in the students' mother tongue and the culture of their country of origin. The Conclusions acknowledged the significant contribution that education can make to the successful integration of migrants into European societies. This support should commence from early childhood education and extend throughout all stages of lifelong learning. It is crucial to implement targeted measures and increased flexibility to meet the needs of learners with a migrant background at any age, enabling them to receive the necessary support and opportunities for active citizenship and the realization of their full potential.

In January 2016, the European Union (EU) passed a resolution on *Intercultural dialogue, cultural diversity, and education*, highlighting the significance of incorporating intercultural dialogue into education. It emphasized that intercultural dialogue serves as a crucial tool for conflict management and fostering a stronger sense of belonging. Various stakeholders, including teachers, parents, non-governmental organizations (NGOs), and human rights organizations, play pivotal roles in the process of intercultural education (IE).

Over the span of nearly 50 years, the European Commission has regularly conducted surveys to examine the implementation of intercultural education within the

educational systems of its Member States. These surveys aim to assess the changes and advancements in European policies regarding IE amidst evolving social dynamics. They also investigate the extent to which IE is reflected in national policies and manifests in the daily realities across EU countries. The analysis encompasses a range of national policies, including specific measures to support migrant children and youth, as well as broader approaches that incorporate IE within curricula and school policies. As part of this process, the Open Method of Coordination was established as an intra-European governance mechanism. It enables the EU to identify common challenges across Member States, identify exemplary practices, and encourage countries to review their existing national policies in light of these findings (Faas, Hadjisoteriou, Angelides, 2014)⁷³.

As noted by Faas (2011)⁷⁴, although there have been unified calls for incorporating an intercultural dimension in education, such as those made by the Council of Europe (2002, 2003, 2005, 2007) and the European Commission (2008), it is important to acknowledge that EU countries possess a significant level of autonomy in the field of education. While countries in Western and Northern Europe have tended to respond to neoliberal policies by focusing on enhancing graduates' employability and introducing a European dimension to their education systems, Central and Eastern European (CEE) countries have been heavily influenced by the legacies of their transition processes, authoritarian central command, and integration with EU structures. These contextual factors have shaped the approaches to intercultural education within CEE countries.

⁷³ Faas D., Hadjisoteriou Ch., Angelides P. 2014. Intercultural education in Europe: policies, practices and trends, in *British Educational Research Journal*, XL, 2, pp. 300-318.

⁷⁴ Faas D. 2011. The Nation, Europe, and Migration: A comparison of geography, history, and citizenship education curricula in Greece, Germany, and England, in *Curriculum Studies*, XLIII, 4, pp. 471-492.

CHAPTER 4.

The Role of Intercultural Communication in the Future of Work

In an increasingly interconnected world, the role of intercultural communication has become pivotal in shaping the future of work. As globalization continues to break down physical and cultural barriers, organizations are expanding their operations across borders and embracing diverse workforces. For example, the surge in remote work has led to teams composed of individuals from varied backgrounds. In response to this, not only do they need traditional skills such as an advanced level of English and digital expertise, but they also now need intercultural skills, that is the ability to effectively navigate and engage with individuals from different cultures. It has emerged as a crucial skill of the 21st century. As Geertz points out, the world “is growing both more global and more divided, more thoroughly interconnected and more intricately partitioned”, becoming “a scramble of differences in a field of connections.”⁷⁵

On the one hand, having individuals from diverse cultures within a company creates room for a variety of perspectives to be considered. This receptiveness to a broad range of viewpoints has shown to enhance the innovative capacity of companies. On the other hand, effective cross-cultural communication is hence vital within a company because it is an instrument to foster a sense of inclusion in the workplace, which in turn helps to boost employee retention rates and to reduce absenteeism. Moreover, at the organizational level, initiatives like induction courses for new employees are ideal opportunities to communicate the policies and culture of a company at the outset. They may help employees to relate to colleagues of different backgrounds, guaranteeing a respectful and inclusive working environment.⁷⁶

4.1. Cultural Intelligence as a Skill for the Future of Work

The term "cultural intelligence" (CQ) was introduced by Christopher Earley and Soon Ang in their 2003 book entitled *Cultural Intelligence: Individual Interactions Across Cultures*⁷⁷ and has since gained prominence in the fields of cross-cultural management, intercultural communication, and global leadership. It is the ability to

⁷⁵ Geertz, C. 2000. *Available light*. Princeton, NJ: Princeton University Press.

⁷⁶ Reuil, Tatiana. 2022. The rise of remote work means we need better 'intercultural skills' - this is what that means. *World Economic Forum*. Available at: <https://www.weforum.org/agenda/2022/03/remote-work-intercultural-skills/>

⁷⁷ P. Earley, S. Ang. 2003. *Cultural intelligence: Individual interactions across cultures*. Stanford University Press, Stanford, CA.

adjust, interact effectively and act appropriately across multiple cultures that has been labeled “cultural intelligence” (CQ), which is also defined as a “multifaceted competency consisting of *cultural knowledge*, the practice of *mindfulness*, and a repertoire of *behavioral skills*.”⁷⁸

It has been further delineated that CQ is “the ability to engage in a set of behaviors that use skills (i.e., language or interpersonal skills) and qualities (e.g., tolerance for ambiguity, flexibility) that are tuned appropriately to the culture-based values and attitudes of the people with whom one interacts.”⁷⁹ To exhibit cultural intelligence, an individual must understand how to withhold judgment of a situation until multiple cues can be assessed and integrate and comprehend the knowledge gained from the situation.⁸⁰ Cultural exposure, viewed as encounters associated with a particular region / institutional context that facilitate the cultivation of familiarity with or comprehension of the norms, values, and beliefs inherent to them, contributes to enhancing cultural intelligence.

Extensive research has been done to explore the impact of CQ on outcomes within the workplace, and the prevailing trend in the majority of studies indicates positive associations between these variables.⁸¹ Therefore, cultural intelligence is viewed as a key international business competency⁸² that predicts work adjustment, job performance and satisfaction, decision-making, and well-being, thus it is a pivotal skill for the future of work.⁸³ In this line of reasoning, David Livermore (2009) outlines four essential types of capabilities crucial for assessing an individual's cultural intelligence (CQ):

- **CQ drive**, reflecting the motivation to learn and engage with diverse cultures;
- **CQ knowledge**, emphasizing awareness of cultural differences and their implications;
- **CQ strategy**, indicating the adeptness in applying cultural awareness within multicultural environments;

⁷⁸ Thomas, D.C. 2008. *Cultural intelligence: People skills for global business*. ReadHowYouWant. com.

⁷⁹ Petterson, B. 2004. *Cultural Intelligence: A guide to working with people from other cultures*. Boston, MA : Intercultural Press.

⁸⁰ Triandis, H.C. 2006. Cultural intelligence in organizations. *Group & Organization Management*, 31(1), pp. 20-26.

⁸¹ Rockstuhl T, Van Dyne L. 2018. A bi-factor theory of the four-factor model of cultural intelligence: Meta-analysis and theoretical extensions. *Organizational Behavior and Human Decision Processes*, 148, pp. 124-144.

⁸² Schlaegel C., Richter N.F., Taras V. 2021. Cultural intelligence and work-related outcomes: A meta-analytic examination of joint effects and incremental predictive validity. *Journal of World Business*, 56 (4), pp. 101-209.

⁸³ Pun T.C., Spiess T., Schlögl S., Ploder C. 2023. CULTURAL INTELLIGENCE AS A SKILL FOR THE FUTURE OF WORK, *INTED2023 Proceedings*, pp. 133-141.

- **CQ action**, signifying the capacity to adapt and enact suitable behaviors in varied multicultural scenarios.⁸⁴

Livermore's model, chosen for its divergence from the predominant focus on national culture prevalent in Hofstede's investigations (1984, 1996, 2001), accentuates the individual level, introduces strategies to navigate diversity in multicultural contexts and facilitates swift adaptation to the volatile, uncertain, complex, and ambiguous (VUCA) work environment.

4.2. Communication, Cross-cultural Collaboration and Organizational Success

At present, communication, collaboration and connectivity are more critical than ever. However, culture emerges as a frequently overlooked and underestimated challenge in the realm of global professional services despite the fact that the impact of culturally induced variations in work styles directly affects team performance. In view of this, cross-cultural sensitivity becomes highly demanding, when leading global teams in times of increasing polarization and diminishing tolerance.

Taking into account the fact that 37 percent of the global workforce is now mobile, 30 percent of full-time employees now do most of their work outside of the employers' location, and 20 percent of the workforce is composed of temporary workers, contractors, and freelancers,⁸⁵ company culture, especially transparency in internal communications, has a critically important impact on their organization's ability to realize its mission and vision. So, culture becomes a primary concern for executives, and the heightened attention to employee engagement aligns with the broader emphasis on cultivating a sense of belonging in a workforce that is progressively dispersed, global, and mobile.

Collaboration strengthens relationships, so the choice of technologies should ideally allow for relationship-building activities as well as efficient communications. The future working environment will require a shift in how we communicate and collaborate, since 76 percent of executives surveyed in the Deloitte study prioritize a move away from email and toward more sophisticated digital tools which will be critical enablers

⁸⁴ Livermore, D., 2009. *Leading with cultural intelligence: The new secret to success*. AMACOM Div American Mgmt Assn.

⁸⁵ *Transitioning to the Future of Work and the Workplace: Embracing Digital Culture, Tools, and Approaches* / White Paper on the Future of Work Research Study. Deloitte, 2016.

for increased cross-cultural teaming. In fact, 72 percent of respondents see virtual teaming capabilities across cultures as becoming more significant and normative.⁸⁶

For instance, in this context, time management emerges as a critical factor among the generic cultural differentiators, influencing the success of work flows, technology-enhanced communication and project execution. The division of culture into monochronic and polychronic time was introduced by anthropologist Edward Hall and has been widely used to characterize cultural differences in the perception and management of time:

- **monochronic time (M-time)**. These cultures tend to view time as linear and sequential, and people in monochronic cultures value punctuality, adhere to schedules, and prioritize one task at a time.
- **polychronic time (P-Time)**. These cultures perceive time as fluid, flexible, and less constrained by schedules, and people in polychronic cultures are comfortable with interruptions, may engage in several tasks at once, and prioritize relationships over strict adherence to time.

Understanding this distinction influences expectations regarding digital communication, punctuality, time management, and the structure of daily correspondence. Beyond any doubts, these are generalizations, and individual behavior may vary within cultures. Similarly, Edward Hall distinguished between **high-context** and **low-context cultures** to describe cultural communication styles. They refer to the degree to which communication relies on explicit verbal expression versus implicit non-verbal cues and contextual elements.⁸⁷

There is no one-size-fits-all approach when it comes to cross-cultural management. Much will depend on the nature of the organization, the size of the workforce and the range of different backgrounds that make up a cross-cultural team. The key is often in understanding where any cultural differences lie, acknowledging and respecting those differences where needed, whilst finding ways to unify a team to work together towards a common goal. A company should function as an “intercultural alliance”, a collaborative partnership involving individuals from diverse social identities

⁸⁶ *Transitioning to the Future of Work and the Workplace: Embracing Digital Culture, Tools, and Approaches / White Paper on the Future of Work Research Study.* Deloitte, 2016.

⁸⁷ *Handbook of Intercultural Communication / Iryna Odrekhivska, Oksana Dzera, Anna Halas, Oksana Molderf, Yuliia Naniak, Oleksandra Litvinyak ; ed. by Iryna Odrekhivska.* Lviv, Lviv University Publishing, 2023.

or cultural backgrounds whose joint efforts are directed toward the advancement of a shared vision. To achieve this, there are different approaches that can be undertaken:

- **Implement a cross-cultural policy.** It is essential for employers to provide a clear commitment to promote equal employment opportunities for people from all cultural backgrounds, and to prevent discrimination and harassment because of cultural differences. A written policy can help to communicate this ethos to employees and job applicants, and reinforce the need for co-workers to treat each other with respect and dignity.
- **Create a cross-cultural awareness programme.** A lot of employers are accustomed to the need to provide training on equality and diversity in the workplace. However, specific training on cultural perspectives can help to provide greater insight and understanding into the social behaviors and values of others. To create a genuinely inclusive workplace, everyone needs to fully understand and be sensitive to cultural differences.
- **Introduce cultural conflict resolution procedures.** If conflict arises as a result of cultural differences, there must be appropriate procedures in place to effectively deal with this. However, in many cases, conflict arising as a result of simple cultural misunderstandings can be resolved informally. Often a chat with the person or people responsible, to provide them with a better contextual understanding of their behavior, will lead to an agreement that the behavior will cease. Generally, the importance of one-to-ones cannot be underestimated. By getting to know the unique story of each employee or team member, this will enable line managers and team leaders to gain greater insight into individual differences.

In general, intercultural dialogue must take into consideration both individuals' *objective* and *subjective* cultures. While objective culture, also known as 'Big-C' culture, refers to "the set of institutional, political and historical circumstances that have emerged from and are maintained by a group of interacting people", subjective culture, also known as "little-c" culture, refers to the "worldview of people who interact in a particular context."⁸⁸ It is important to take into consideration both types of culture when engaging in intercultural dialogue.

⁸⁸ Bennett, M. 2009. Defining, measuring, and facilitating intercultural learning: A conceptual introduction to the Intercultural Education double supplement. *Intercultural Education* 20: S1–S13.

Today, it is vital to find a harmony between Big-C and little-c by putting employee development at the core of your business. There are three steps one can take to elevate it:

- **Create a culture of trial and error:** Failure, errors, mishaps all play a vital role in helping employees learn and grow. Unfortunately, many organizations penalize mistakes and create employees who are risk-averse and too shy or nervous to try anything new. Creating a safe space where employees can get involved in projects out of their comfort zone generates new skills, boosts confidence, and encourages out-of-the-box thinking.
- **Encourage 360-degree feedback:** Encouraging employees to collect feedback from peers enables them to gain a better understanding of their own capabilities. Regular feedback also gives individuals the opportunity to reassess their learning needs.
- **Embrace talent technology:** Talent technology can hold invaluable data which can help get a better understanding of employees' skillsets, growth, and development. For example, you can track and measure KPI's and learning progress.⁸⁹

Effective intercultural communication within an organization contributes significantly to its success through enhancing collaboration and team performance, resolving conflicts efficiently, making well-informed decisions and creating an inclusive environment, fostering global market penetration and contributing to the positive brand image.

⁸⁹ *How do you retain talent during 'The Great Reassessment' era?* Available at: <https://www.iris.co.uk/blog/hr/how-do-you-retain-talent-during-the-great-reassessment-era/>

CHAPTER 5.

Intercultural Model of Dual Education for the Future-Ready Workforce

5.1. Connecting Intercultural and Dual Education

The model of dual education, rooted in the principles of intercultural communication and an understanding of the future of work, represents a dynamic and innovative approach to preparing individuals for the evolving professional landscape. This model recognizes the increasing importance of cultural competence and the ability to navigate diverse work environments in a globalized world.

By integrating intercultural communication into the educational framework, students gain essential skills to effectively collaborate and communicate with individuals from different cultural backgrounds. Moreover, this model also emphasizes the principles of the future of work, acknowledging the rapid advancements in technology, automation, and shifting employment trends. Students are equipped with the knowledge and tools necessary to adapt to these changes, fostering their resilience and agility in the face of evolving work dynamics. Through this dual education model, individuals are not only prepared for successful careers, but also for embracing the complexities and opportunities that arise in an interconnected and rapidly changing world.

The ultimate goal is to prepare the students to be interculturally competent. According to the conceptualization by Byram, intercultural competence (IC) comprised a diverse set of skills and attitudes, including

- the knowledge of contents about the others' cultures (*savoirs*),
- the skills to interpret and relate (*savoir comprendre*),
- the skills to discover and/or interact (*savoir apprendre/faire*),
- the attitudes of being with others (*savoir être*),
- the attitude of critical cultural awareness (*savoir s'engager*), which refers to "relativisation of one's own and valuing of others' meanings, beliefs and behaviors."⁹⁰

In the context of dual education, the process of reflecting on the experiences of others and engaging in collaborative and industry-based learning often intertwines with the development of cultural self-awareness and questioning of one's self-concept. As

⁹⁰ Byram, M. 1997. *Teaching and assessing intercultural communicative competence*. Clevedon: Multilingual Matters.

Bennett contends, this reflective practice serves as a precursor to intercultural learning. Through the dual education model, students not only gain academic knowledge but also cultivate a deeper understanding of their own cultural perspectives and those of their peers or senior colleagues. This reflective and collaborative approach fosters intercultural competence, preparing students for effective engagement in diverse and interconnected professional settings.

It is predicted that the future workplace will be multi-generational, with four generations working side-by-side. While traditional notions of hierarchy and seniority will become less important, the skills for leading and managing the 4G workforce, and for facilitating collaboration across multiple generations and their values, will be in increasing demand. Cross-generational skills acquisition will be of urgent importance, and it is where dual education comes in handy as an excellent platform to form and enhance cross-generational communication capabilities.

Apart from providing a reflective and multigenerational platform to enhance (inter)cultural communication skills, dual education also cultivates a global mindset by fostering collaborative problem-solving and promoting adaptability in diverse work environments. Yet combining intercultural and dual higher education involves some challenges as well:

- **Challenge 1: *Language barrier***
Gaining knowledge in a language that learners do not understand well can be twice as challenging as in a customary classroom setting. As Laura Fields aptly notes, "Language, as we know, is a large part of thinking. If we don't allow students to use their mother tongue, we may actually be silencing their inner voice." Overcoming this challenge involves embracing multilingualism in the classroom. Allowing students to use their native language or incorporating linguistically and culturally mindful resources and practices during teaching enhances the academic performance of students who speak other languages.
- **Challenge 2: *Domination of different learning styles***
Studying abroad offers enriching experiences, but adapting to a new educational environment presents challenges. Students bring with them unique educational backgrounds and learning styles shaped by their cultural and academic experiences in their home countries. Their learning patterns, encompassing approaches, regulation strategies, conceptions, and orientations, may not always align with the learning expectations in foreign universities. Addressing this challenge requires a nuanced understanding of

diverse learning styles and the implementation of inclusive teaching practices that accommodate a spectrum of learning preferences.

Kember and Gow⁹¹ made an interesting observation that documented goals of higher education are remarkably similar across different national systems of higher education regardless of the cultural setting. Typically, these goals include the promotion of independent learning and critical thinking. However, if examined closer, they demonstrate striking differences.

For example, in Sri Lanka, at examinations students are required to reproduce the information and knowledge transmitted in the classroom considerably, despite the fact that this practice is being criticized in many instances. On the other hand, the situation is deemed to improve as the students advance, as higher-level thinking is not emphasized in the first year where the emphasis is on teaching the basic concepts of the discipline.

Biemans and Van Mil⁹² studied Dutch and Chinese first year students' learning patterns at a Dutch agricultural university. The study results of these Chinese students were disappointing despite hard work. The Chinese students indicated to use more reproductive, stepwise, sequential, detailed and analytic study strategies, while their Dutch colleagues reported to use more deep, structuring, and relating strategies aimed at identifying main points and constructing an overall, coherent picture of the study materials. The authors concluded that the way the Chinese students were used to learning in China did not fit the demands of the educational system at this Dutch university, and that a lot of Chinese students experienced problems adapting their way of learning to the Dutch educational system.

As a rule, the Nordic countries use techniques and tools that encourage collaboration; students work much more in groups, do projects together, and ask teachers questions. The central relationship in the classroom is among students.

In Mediterranean countries, teachers primarily lecture, students take notes, or read textbooks; teaching practices are oriented towards copying from the board. Teachers ask students questions and the central relationship in the classroom is between the teacher and the student.

⁹¹ Gow, L., & Kember, D. 1990. Does higher education promote independent learning?. *Higher education*, 19(3), 307-322.

⁹² Biemans, H., & Van Mil, M. 2008. Learning styles of Chinese and Dutch students compared within the context of Dutch higher education in life sciences. *Journal of Agricultural education and extension*, 14(3), 265-278.

Students engaged in dual education programs often come from diverse cultural and educational backgrounds. As a result, they may have distinct learning preferences, approaches, and orientations shaped by their previous academic experiences. By acknowledging and adapting to these varied learning styles, dual education programs can enhance student engagement, satisfaction, and overall academic performance. Tailoring teaching methods, materials, and assessments to accommodate diverse learning styles fosters a more inclusive and supportive educational experience. This approach aligns with the principles of dual education, emphasizing flexibility and personalized learning to meet the individual needs of students from different backgrounds.

It is therefore vital to incorporate intercultural aspects into dual education through:

- **multilingual resources** (providing learning materials in multiple languages to accommodate students from various language backgrounds, which ensures that language barriers are minimized);
- **cultural sensitivity training** (this can involve workshops, seminars, or online modules that promote awareness and understanding of different cultural norms, communication styles, and expectations);
- **diverse teaching methods** (this could include a mix of visual, auditory, and kinesthetic learning activities to engage students with varying preferences);
- **peer learning** (group projects, discussions, and collaborative assignments can provide opportunities for students to learn from each other and appreciate diverse perspectives);
- **inclusive assessment practices** (offering flexibility in assignment formats and allowing students to showcase their understanding in ways that resonate with their individual learning preferences is worth integrating);
- **regular feedback mechanisms** (implementing regular feedback mechanisms along with the feedback loop that ensures adjustments can be made to the educational environment based on the evolving requirements of a culturally diverse student body).

By incorporating these practices, dual education programs can create a culturally sensitive and effective learning environment for students from diverse backgrounds.

5.2. Approaches to Curriculum Adaptation for Intercultural Dual Education

Intercultural dual education, characterized by the integration of intercultural communication and diverse learning styles, necessitates thoughtful curriculum adaptation. Curriculum transformation is a process that never ends because of the changes that are continuing throughout the world. In line with the approach elaborated by James Banks, a mainstream-centric curriculum has negative impact on mainstream students because it reinforces their false sense of superiority, gives them a misleading conception of their relationship with other racial, ethnic or different groups, and denies them the opportunity to benefit from the knowledge, perspectives, and frames of reference that can be gained from studying and experiencing other cultures and groups.⁹³ In view of this, it is possible to explore four distinct approaches to curriculum adaptation, emphasizing their implications for fostering intercultural awareness and embracing diversity within dual education programs:

- **The Contributions Approach.** It represents a foundational step in incorporating multicultural education into dual education. This method involves selecting materials and activities that highlight events or figures from various cultures, promoting an initial level of exposure to diverse perspectives. However, it reflects the least involvement in multicultural education approaches and may be perceived as a surface-level engagement with cultural diversity.
- **The Additive Approach.** Content, concepts, themes, and perspectives are introduced into the existing curriculum without altering its fundamental structure. This involves integrating literature by and about individuals from diverse cultures into the mainstream curriculum, enriching the educational experience without fundamentally changing its core framework. While it acknowledges the importance of diversity, critics argue that it may not fully address the underlying assumptions and biases embedded in the original curriculum.
- **The Transformation Approach.** It signifies a more profound alteration of the curriculum, encouraging students to perceive concepts, issues, themes, and problems from multiple cultural perspectives. This approach aligns with critical thinking, challenging students to reconsider their assumptions and fostering a

⁹³ Bank, James, Banks Cherry A. 2016. *Multicultural Education: Issues and Perspectives*. Wiley.

deep appreciation for diversity as an inherent aspect of education. It acknowledges the importance of incorporating cultural diversity at a foundational level within dual education.

- **The Social Action Approach.** Combining the transformative elements with a commitment to social change, the Social Action Approach transcends theoretical understanding to practical application. Students not only engage in critical analysis of social issues but are also encouraged to take tangible actions to effect positive change. This approach aligns with the broader goals of intercultural dual education by empowering students to actively contribute to a more inclusive and equitable society.⁹⁴

As intercultural dual education continues to evolve, selecting the appropriate curriculum adaptation approach becomes pivotal. While the Contributions and Additive Approaches offer initial exposure, the Transformation and Social Action Approaches deepen the educational experience by challenging assumptions and fostering active engagement. The choice of approach depends on the overarching goals of the dual education program and the commitment to nurturing intercultural competence among students.

The incorporation of multicultural content into the curriculum often involves a blending and intertwining of the four approaches. In practical teaching scenarios, educators may leverage one approach, such as the Contributions approach, as a stepping stone towards more intellectually demanding methods like the Transformation and Social action approaches. Expecting an immediate transition from a predominantly mainstream-centric curriculum to one emphasizing decision-making and social action is unrealistic. Instead, the progression from the initial stages to more advanced levels of multicultural content integration is likely to occur gradually and cumulatively.

⁹⁴ Bank, James, Banks Cherry A. 2016. *Multicultural Education: Issues and Perspectives*. Wiley.

KEY MESSAGES

- **Intersection of Future Work Trends and Intercultural Communication**

Recognizing the intersection of future work trends and intercultural communication is imperative for preparing students for success in a globalized workforce.

- **Significance of Dual Education in Preparing Students**

Dual education models play a crucial role in equipping students with the skills needed to navigate the complexities of the future workplace, ensuring adaptability and cultural competence.

- **Cultural Diversity as an Asset**

Embracing cultural diversity within educational contexts transforms it into an asset, enriching the learning experience and enhancing students' abilities to engage in a globalized professional environment.

- **Curriculum Adaptation for Inclusivity**

Adapting curriculum to reflect diverse cultural backgrounds is essential for creating an inclusive learning environment that accommodates various learning styles and linguistic preferences.

- **Promoting (Inter)Cultural Competence**

Dual education models contribute significantly to the development of cultural competence, fostering self-awareness, sensitivity, and effective communication across diverse cultural contexts.

- **Alignment with Future Work Skills**

Dual education aligns with essential future work skills, integrating competencies such as adaptability, critical thinking, and technological literacy into its approaches.

- **Practical Training of Dual Educators**

Providing practical tips and strategies for educators and institutions is essential for the successful implementation of dual education models, addressing language barriers, and fostering a culturally inclusive learning environment.

- **Organizational Culture and Educational Values**

The alignment of institutional values and organizational culture with the principles of dual education is crucial for its effective adoption and successful integration into educational systems.

- **Preparing Students for Globalized Workforce Challenges**

Dual education prepares students to navigate challenges in a globalized workforce by emphasizing cultural intelligence and adaptability as essential skills for success.