

THE HUMAN EDGE

Leveraging transversal skills
in the AI-driven workplace

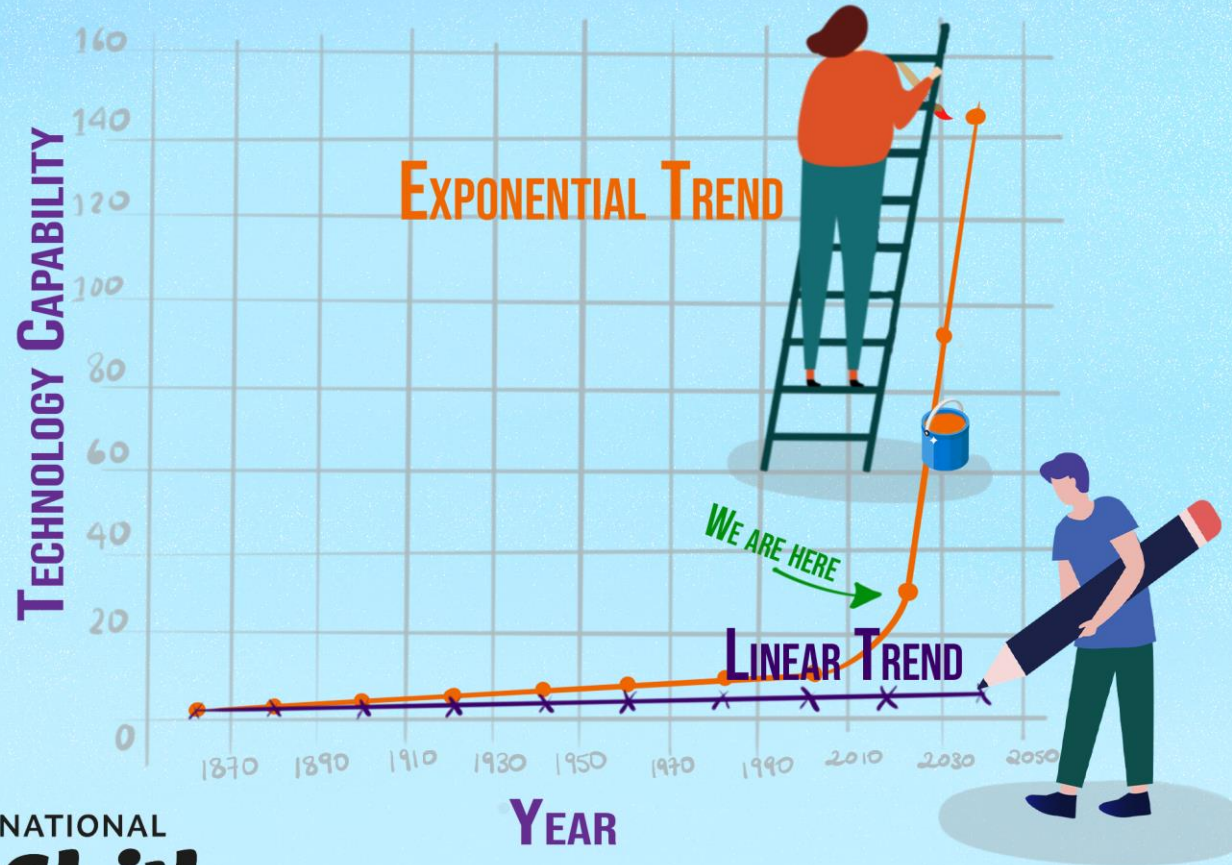


MCAST



LAW OF ACCELERATING RETURNS

THE LAW OF ACCELERATING RETURNS ASSERTS THAT TECHNOLOGICAL PROGRESS COMPOUNDS EXPONENTIALLY, RESULTING IN RAPIDLY ACCELERATING INNOVATION AND CHANGE.

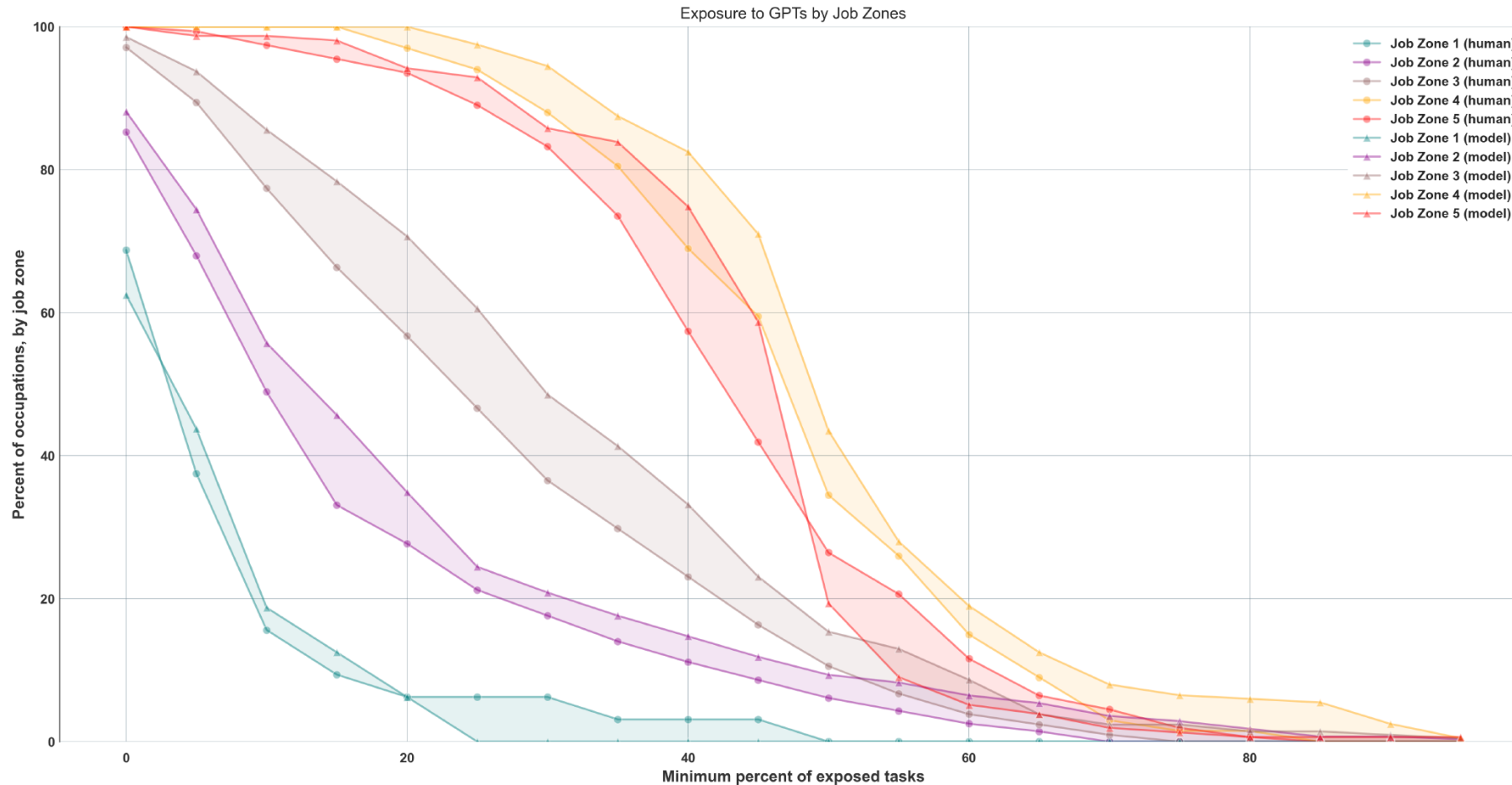


NATIONAL
Skills
COUNCIL

Source: Kurzweil, 2001



WORKING PAPER



Source: Eloundou, Manning, Mishkin, & Rock, 2023

Figure 5: β exposure ratings of occupations in the five Job Zones, which are groups of similar occupations that are classified according to the level of education, experience, and on-the-job training needed to perform them.



Basic Skill	α (std err)	β (std err)	ζ (std err)
<i>All skill importance scores are normalized to be between 0 and 1.</i>			
Constant	0.082*** (0.011)	-0.112*** (0.011)	0.300*** (0.057)
Active Listening	0.128** (0.047)	0.214*** (0.043)	0.449*** (0.027)
Mathematics	-0.127*** (0.026)	0.161*** (0.021)	0.787*** (0.049)
Reading Comprehension	0.153*** (0.041)	0.470*** (0.037)	-0.346*** (0.017)
Science	-0.114*** (0.014)	-0.230*** (0.012)	-0.346*** (0.017)
Speaking	-0.028 (0.039)	0.133*** (0.033)	0.294*** (0.042)
Writing	0.368*** (0.042)	0.467*** (0.037)	0.566*** (0.047)
Active Learning	-0.157*** (0.027)	-0.065** (0.024)	0.028 (0.032)
Critical Thinking	-0.264*** (0.036)	-0.196*** (0.033)	-0.129** (0.042)
Learning Strategies	-0.072* (0.028)	-0.209*** (0.025)	-0.346*** (0.034)
Monitoring	-0.067** (0.023)	-0.149*** (0.020)	-0.232*** (0.026)
Programming	0.637*** (0.030)	0.623*** (0.022)	0.609*** (0.024)

Science and **critical thinking** skills are strongly negatively associated with exposure.

Programming and **writing** skills show a strong positive association with exposure.



Influencing Factors



**ENVIRONMENTAL
SUSTAINABILITY**

**DEMOGRAPHIC
CHANGE**

**POLITICAL
UNCERTAINTY**

URBANISATION

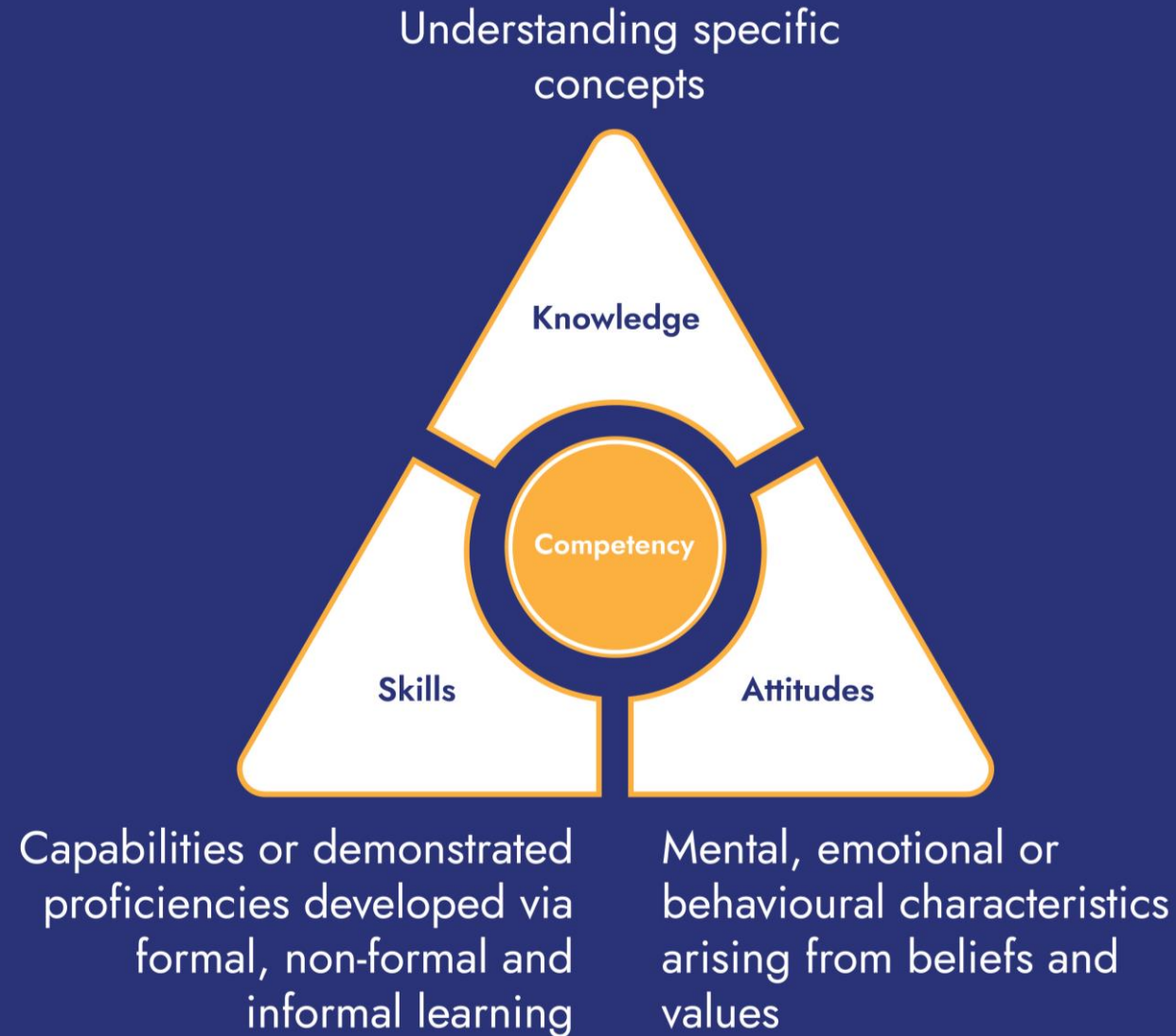
**TECHNOLOGICAL
CHANGE**

GLOBALISATION

**INCREASING
INEQUALITY**



Competencies



Technical

~~Hard Skills~~

VS

Transversal

~~Soft Skills~~

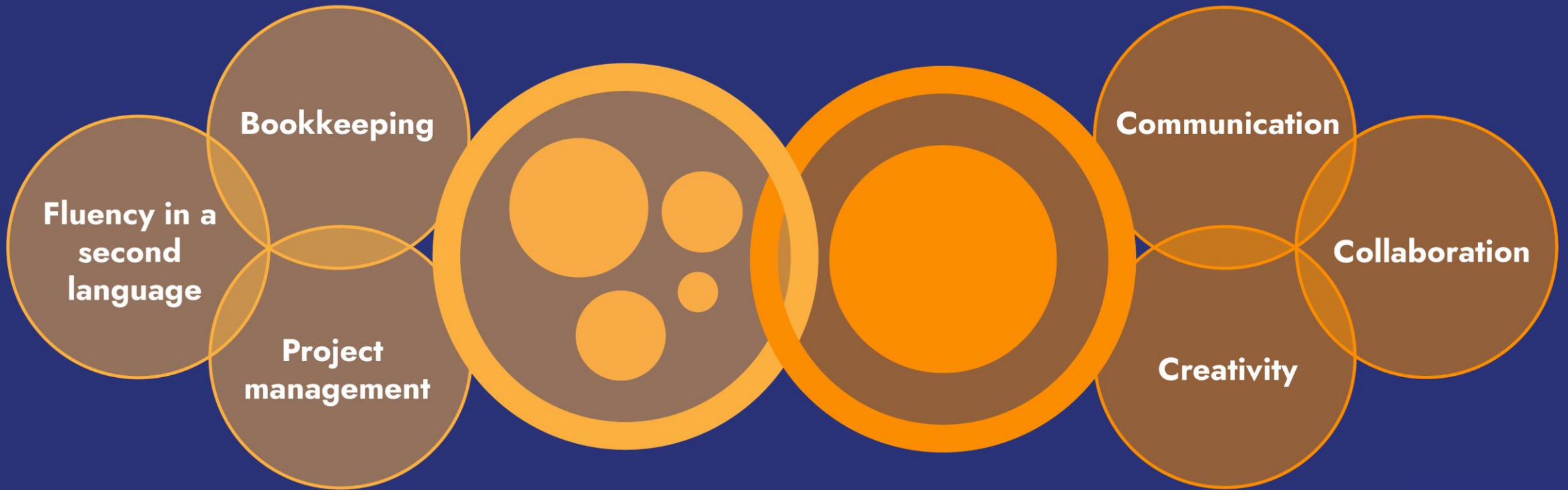


Table 6.1

Foundational skills for the future

Source: McKinsey - Defining the skills citizens will need in the future world of work (June 2021)

COGNITIVE		INTERPERSONAL	
Critical thinking <ul style="list-style-type: none"> Structured problem solving Logical reasoning Understanding biases Seeking relevant information 	Planning and ways of working <ul style="list-style-type: none"> Work-plan development Time management and prioritisation Agile thinking 	Mobilising systems <ul style="list-style-type: none"> Role modelling Win-win negotiations Crafting an inspiring vision Organisational awareness 	Developing relationships <ul style="list-style-type: none"> Empathy Inspiring trust Humility Sociability
Communication <ul style="list-style-type: none"> Storytelling and public speaking Asking the right questions Synthesising messages Active listening 	Mental Flexibility <ul style="list-style-type: none"> Creativity and imagination Translating knowledge to different contexts Adopting a different perspective Adaptability Ability to learn 	Teamwork effectiveness <ul style="list-style-type: none"> Fostering inclusiveness Motivating different personalities Resolving conflicts Collaboration Coaching Empowering 	
SELF-LEADERSHIP		DIGITAL	
Self-awareness and self-management <ul style="list-style-type: none"> Understanding own emotions and triggers Self-control and regulation Understanding own strengths Integrity Self-motivation and wellness Self-confidence 		Digital fluency and citizenship <ul style="list-style-type: none"> Digital literacy Digital learning Digital collaboration Digital ethics 	
Entrepreneurship <ul style="list-style-type: none"> Courage and risk-taking Driving change and innovation Energy, passion, and optimism Breaking orthodoxies 		Software use and development <ul style="list-style-type: none"> Programming literacy Data analysis and statistics Computational and algorithmic thinking 	
Goals achievement <ul style="list-style-type: none"> Ownership and decisiveness Achievement orientation Grit and persistence Coping with uncertainty Self-development 		Understanding digital systems <ul style="list-style-type: none"> Data literacy Smart systems Cybersecurity literacy Tech translation 	

Source: McKinsey, 2021



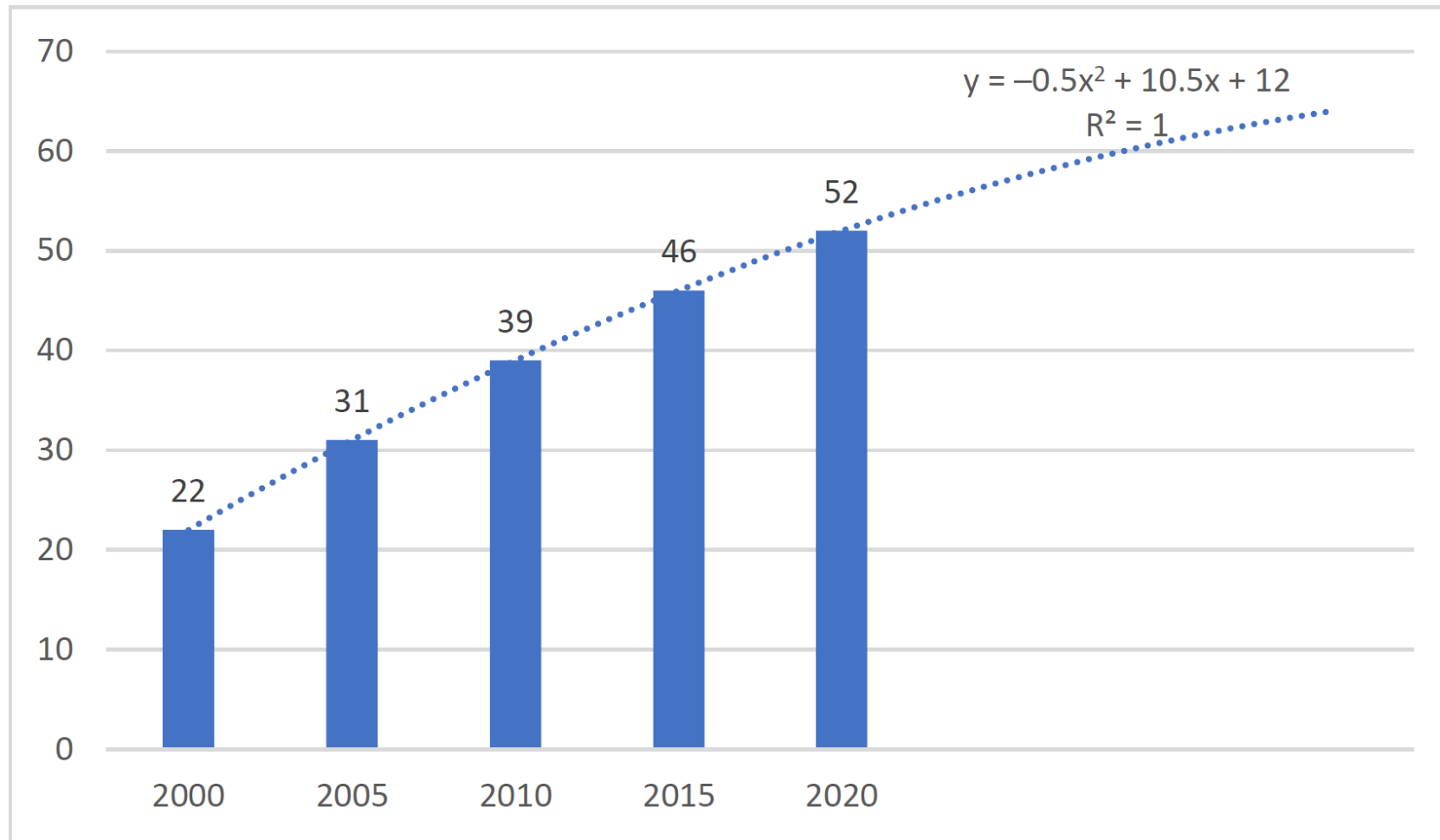
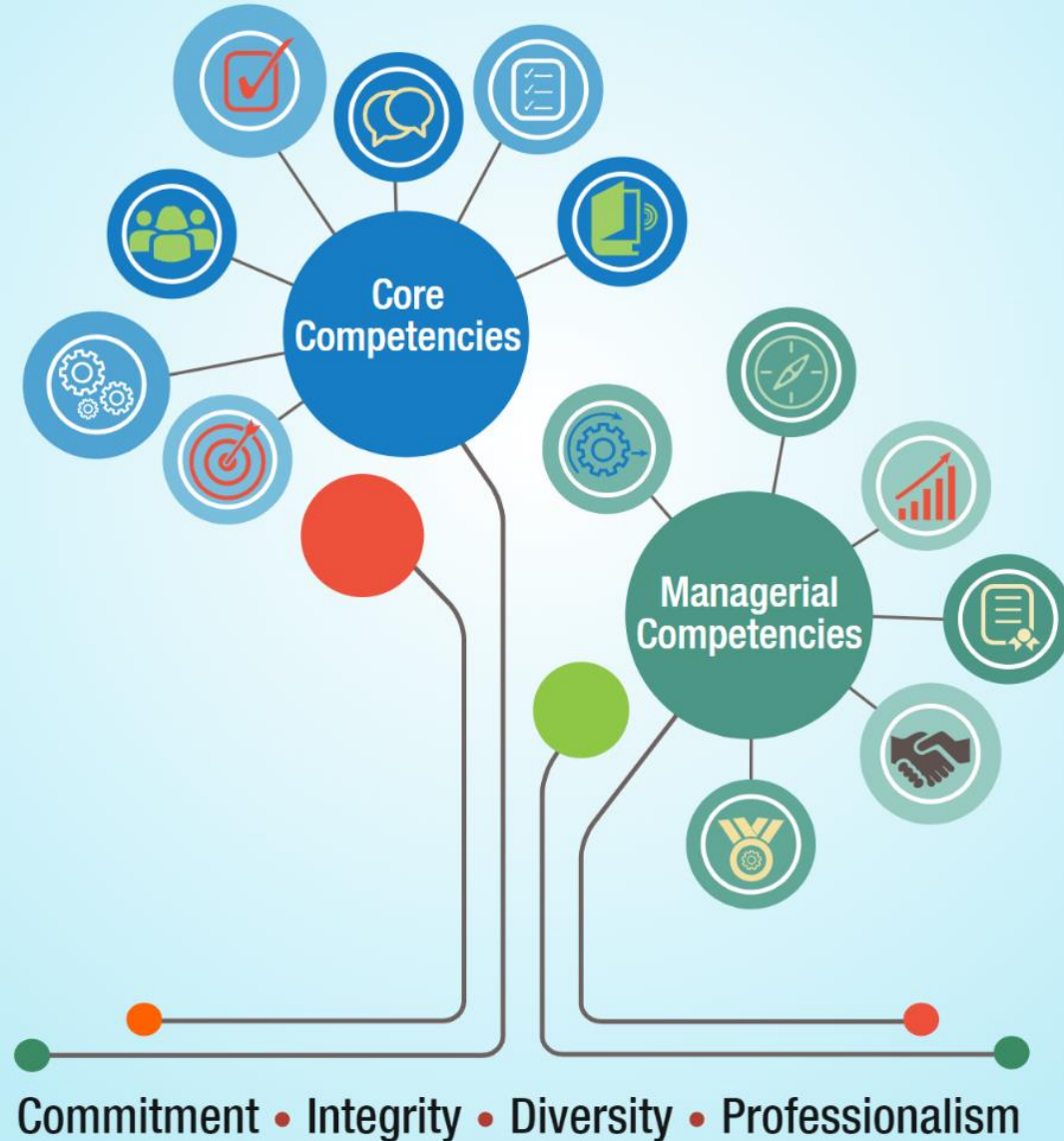


Figure 3. The forecast of the need for soft skills in the workplace. Source: the authors based on data from (Rasli et al. 2020).

UNESCO Competency Framework

Learn • Develop • Excel



How to Conduct Effective Employee Skill Assessments?

1. Prepare thoroughly
2. Involve multiple raters
3. Share results constructively
4. Re-assess regularly

Workforce Planning and 21st Century Skills

The focus on 21st century skills such as leadership, creativity and empathy is evident. 80% of respondents indicated that their organisation not only recognises the importance of these skills, but actively invests in promoting them, while 86% stated their commitment to nurturing re-skilling and continuous learning to help workers remain employable.

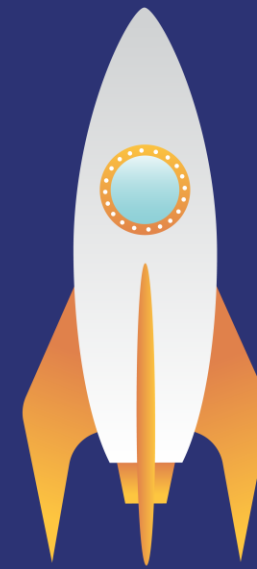
HR Pulse Survey, a collaboration between the **Malta Foundation for Human Resources Development (FHRD)** and **PwC Malta (2023)**

Today, we'd like to gain a deeper understanding of the diverse skill sets present in this room. Below, you will find a list of 8 transversal skills.

- 1st | Creativity
- 2nd | Innovation
- 3rd | Critical Thinking
- 4th | Resilience
- 5th | Adaptability
- 6th | Communication
- 7th | Agility
- 8th | Empathy



Innovative Pedagogies & Training Methods to foster Transversal Skills



Coaching

Design Thinking

Experiential Learning

Inquiry-Based Learning

Project-Based Learning (PBL)

Collaborative Learning

Gamification



10%

Structured Learning

Formal &
off the job learning

20%

Social Learning

Non-formal &
near the job learning



70%

Work Place Learning

Informal & on the
job learning

70: 20: 10

**HR Learning &
Development Model**



HUMAN RESOURCES MANAGER

COMPETENCIES

EMOTIONAL INTELLIGENCE

CONFLICT RESOLUTION

SKILLS

ACTIVE LISTENING

QUESTIONING

KNOWLEDGE

DIFFERENCE BETWEEN CONSTRUCTIVE
AND NON-CONSTRUCTIVE FEEDBACK

EFFECTIVE COMMUNICATION
STRATEGIES

ATTITUDES

CALM

POSITIVE



Most Requested

BASIC Competencies

Literacy

Applied STEM

Digital literacy

Learning to learn

Ethical & Social
Responsibility

TECHNICAL Competencies

Broad

Project management

Design & Systems
Thinking

Environmental
Stewardship

Data analysis

Job Specific Skills

Continuous &
on-the-job
learning

TRANSVERSAL Skills

Creativity

Innovation

Critical thinking

Resilience

Adaptability

Communication

Agility

Empathy



Most Requested

I hear and I forget = Compulsory learning
I see and I remember = Imputed learning
I do and I understand = Immersive learning



NATIONAL
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COUNCIL

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Thank you.