SKILL TYPES BY INSTITUTIONS AND RESEARCHERS (Na, 2019)

Common skill type		ILO – Brewer and Coryn (2015) analysis of six countries	ILO – Stoevska (2015) generic type	UNESCO (2014)	USA – CareerOneStop (2017)	USA – O*NET (2017)	USA – Casner-Lotto and Barrington (2006)	USA – O'Neil et al. (1992)	USA – SCANS (1991)	USA – ACT WorkKeys (2015)	Singapore – Workforce Skills qualifications (2017)	Australia – Curtis and McKenzie (2001)	Korea – Na et al. (2003)
Core skills	Basic skills	**Basic or foundational skills** - Literacy - Numeracy	**Basic skills** - Writing and reading skills - Numeracy	**Foundation skill** - Basic academic knowledge - Literacy - Numeracy	**Academic competencies** - Reading - Writing - Mathematics - Science - Communication (listening and speaking) - Critical and analytic thinking - Basic computer skills	**Basic skills** - Reading comprehension - Active listening - Writing - Speaking - Mathematics - Science - Critical thinking - Active learning - Learning strategies - Monitoring	**Basic knowledge skills** - Reading comprehension - Writing - Mathematics - Science - Economy - Foreign language	**Basic skills** - Reading - Writing - Computation - Arithmetic - Communication skills - Academic skills	**Basic skills** - Reading - Writing - Mathematics - Listening - Speaking	**- Reading and using work-related text - Applying mathematical reasoning to work-related problems**	**Foundational competencies**	**Basic skills** - Thinking skills - Contextual understanding - Organizational skills	**Basic competencies** - Literacy - Numeracy - Communication skills
	Personal or professional skills	**Professional or personal skills** - Honesty, integrity - Work ethic	**Generic/ transferable/ soft portable skills** - Professional and personal skills (punctuality, honesty, reliability, dependability, self-organization, teamwork)	**Transversal skills** - Interpersonal skills (e.g., presentation and communication, organizational skills, teamwork) - Intrapersonal skills (self discipline, enthusiasm, perseverance, self motivation)	**Personal effectiveness competencies** - Interpersonal competencies - Integrity - Personal acceptability - Initiative - Dependability and reliability - Lifelong learning	**Cross-functional skills** - Social skills	**Applied skills** - Teamwork/ collaboration - Diversity - Lifelong learning/self direction - Professionalism/work ethic - Ethics/social responsibility	**Personal characteristics and attitudes** - Responsibility - Self esteem, Self management - Integrity - Personal work habits **Interpersonal and teamwork skills** - Serves customers, - Works with diversity - Leadership - Teamwork, organizational structure - Interact socially	**Personal qualities** - Responsibility - Self-esteem - Sociability - Self management - Integrity/honesty - Interpersonal		**Cross-cutting competencies**	**Personal attributes** - Continuous learning - Personal attributes - Interpersonal skills	**Basic competencies** - Interpersonal skills - Self development
	Other core skills	**Core work skills** - The abilities to learn and adapt - *To think creatively* - To solve problems independently - To read, write, and compute competently - To listen and communicate effectively - To manage oneself at work - To interact with co-workers - To work in teams or groups - *To handle basic technology* - To lead effectively, as well as follow supervision	**Generic/ transferable/ soft portable skills** - *Problem solving skills* - Decision making skills - Communication skills ICT skills	**Transversal skills** -Global citizenship (respect for diversity) - Media and information literacy	**Workplace competencies** - *Creative thinking and problem solving* - Business fundamentals - Teamwork - Adaptability and flexibility - Marketing and customer focus - Scheduling and coordinating - Checking and examining and recording - *Working with tools and technology*	**Cross-functional skills** - *Complex problem solving skills* - *Systems skills* - *Resource management skills* - *Technical skills*	**Applied skills** - *Critical thinking/ problem solving,* - *Creativity/innovation* - Oral communications - Written communications - *Information technology application* - Leadership	**Higher-order thinking skills** - *Creative thinking* - *Decision making* - *Problem solving* - Reasoning - Drawing conclusion - Etc.	**Thinking skills** - *Creative thinking* - *Decision making* - *Problem solving* - Knowing how to learn - Reasoning *Resources, information, literacy systems technology*	- *Problem solving* - *Critical thinking* - *Information literacy* - **Comparing, summarizing, and analyzing information** -		**Intellectual abilities** - *Thinking Skills* - Contextual understanding (understand interrelationship in work process and systems) - Organizational skills (resource management, coordinate task, etc).	**Basic competencies** - *Problem solving* - Information organizational skills - Business/management skills - Physical ability - Technical skills
Industry Specific Skills		-			**- Industry wide technical competencies - Industry sector technical competencies**	-					**Industry competencies**		**Common industrial competencies**
Occupation Specific Skills		**Vocational/ technical skills** - Specialized skills, - knowledge or know-how needed to perform specific duties or tasks	**Job-specific skills/ technical skills** - Specialist knowledge needed to perform job duties - Knowledge of particular products or services produced - Ability of operating specialized technical tools and machinery - Knowledge of materials worked on	**Specialized skills** - Specific "know-how" needed for a fulfilling and meaningful life and decent employment	**- Occupation specific requirements - Management competencies**	-					**Occupational competencies**		**Work performance competency** (which also includes *common industrial competency, mandatory competency, and optional competency*)

Na, S. I. (2019). Skill mismatch research: Skill dimensions in vocational education and training. In S. McGrath, M. Mulder, J. Papier, & R. Suart (Eds.), *Handbook of vocational education and training: Developments in the changing world of work* (pp. 645-673). Switzerland: Springer.