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RESEARCH ARTICLE

SKILLS AND SUCCESS

Lucita Aguilera

Independent Investigator, EU.

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Abstract

Today's global economy has had a shift from industrial-manufacturing to technology-knowledge having an impact on the skills developed by the new workforce. Traditionally, having strong "hard" skills were enough for career advance and employment. In today's work environment increasing importance has been given to "soft" skills. This means that acquiring and improving both, soft and hard skills, are critical for a complete and productive professional with high performance. Studies have demonstrated a gap of "soft" skills in the new workforce. These skills can be taught and learned, so it's vital to include them in the official school's curriculum to guarantee well prepared graduates with the skills needed for the future.

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Introduction:-

Skills are critical to succeed in any society. They are essentially one of the things that makes each of us unique and valuable. Acquiring and developing skills bring positive effects increasing opportunities and empowering individuals' life. If we look to some definitions, a skill is known as the ability to carry out a task with determined results often within a given amount of time, energy, or both (Wikipedia, 2019); it's about the ability to do something well or expertise (Dictionary, 2019). Noe et al. (2015) define skills as the level of performance of an individual on a particular task or the capability to perform a job well.

Skills have been separated into 3 main categories: technical, human, and conceptual, being said "hard" (technical or academic) the first two and "soft" (behavioral, personal or non-cognitive) the last one, but mainly they are inside two main domains: general and specifics (Sommerville, 2007). Different other names have been given to these categories, but the concept and classification remains the same.

The concept of "soft skills" has been applied to business environments since at least 1936, with the publication of the book "How to Win Friends and Influence People" by Dale Carnegie's, which is essentially the definitive guide to soft skills (Britt, 2016). In 1968 the US Army introduce a training known as "Systems Engineering of Training" where soft skills were defined as "job related skills involving actions affecting primarily people and paper, e.g., inspecting troops, supervising office personnel, conducting studies, preparing maintenance reports, preparing efficiency reports, designing bridge structures" (Whitmore, 1972). In 1972 the US Army officially adopted the term "soft skills" and the following definition was used: "soft skills are important job-related skills that involve little or no interaction with machines and whose application on the job is quite generalized" (Whitmore, 1972). The term was invented to be differentiated from "hard skills" with the purpose of create a technological way of training and measuring the performance of the troops (Wright, 2018). "Soft skills" were defined later as personal attributes that enable someone to interact effectively and harmoniously with other people (Dictionary, 2019). Wikipedia (2019)

Corresponding Author:- Lucita Aguilera

Address:- Independent Investigator, EU.

defines them as a combination of interpersonal people skills, social skills, communication skills, character traits, attitudes, career attributes and emotional intelligence quotient (EQ) among others, that enable people to navigate their environment, work well with others, perform well, and achieve their goals with complementing hard skills. They are non-academic skills related to personality, natural or inherited talents involving common sense, abilities and behaviors such as integrity, communication, courtesy, responsibility, professionalism, teamwork, flexibility, leadership, among others, that facilitate positive interactions with others and the ability to accomplish everyday life challenges. In other words, they are skills less tangible and harder to define and measure than the “hard skills,” but they are absolutely critical to the success or failure of any individual in the workplace (Tulgan, 2016).

“Hard skills”, on the other hand, are learned abilities that are acquired and enhanced through formal education, practice and repetition such as a college program, an apprenticeship or other job-specific trainings (Lavender, 2019). Lei Han (2015) defines hard skills as follow: “hard skills are skills where the rules stay the same regardless of which company, circumstance or people you work with.” A few examples are a degree or certification in a particular discipline, writing, reading, math, computing, typing, proficiency in a foreign language, operating machinery, web design, among others. With the global pandemic in 2020, the most in demand hard skills are changing based on what we are working on, taking the cloud computing to the second place and giving the first place to blockchain (Pate, D. LinkedIn, 2020)

The skills any given individual develops are mainly influenced by education but also by the social changes and economic trending's, therefore the modifications over the time in behavioral models, cultural values and technology are accompanied by significant changes in the demand of skills needed and learned. The economic and demographic transformations happened during the last decades suggest that soft skills demand, known also as “people skills”, “non-cognitive skills”, “social skills” or “life skills”, are shifting along with generational changes to meet the challenges of everyday life. The “non-cognitive” term means that they are not defined for the IQ or knowledge possessed but rather for the behavior displayed in different situations.

The terms “soft” and “hard” skills have been earning more attention and importance during the last years. Surveys conducted for over two decades of research reveal that there is a gap of “soft” skills in the new generation of US workforce because they have developed higher levels of technology skills becoming so proficient and dependent on digital devices that they haven't properly cultivated interpersonal skills. Because of the advance on technology, the new workforce didn't have too much exposure to social interaction and in consequence, they haven't developed the skills to create personal connections and relations (Denisov, 2019). They have been spending most of their time in front of digital equipment's, creating connections and communicating with other people in a virtual way so, a face-to-face interaction has become a big challenge for this new generation and consequently, acquiring the skills required for that.

“Skills gap” is defined “as the difference between the markets need (demand) and the current skills supplied by local education institutes (supply)” (Alsafadi&Abunafesa, 2012). It's an education issue between the skills being taught and the labor requests in the market. Several studies reveal different ways in which the newly graduated struggle when they started their first jobs. A study conducted by Williams (2015) exposed that communication skills was the most important skill students needed to improve, besides others not so critical as negotiation and critical thinking for entry-level college students. Another study by Radermacher et al. (2014) indicated that recent graduates struggle communicating with co-workers and customers.

According to Burner et al (2019) the top 3 missing soft skills in the new US workforce are: 37% problem solving, critical thinking, innovation and creativity, 32% ability to deal with complexity and ambiguity and 31% communication. These authors indicated that the US is facing a growing skills gap that threatens the nation's long-term economic prosperity. This study also reveals that the skills gap has been worsened into the organizations during the last years and it's not showing signs of improvement or going away. It's a fact that the new US workforce doesn't have enough skilled candidates to fill the increasing number of high social and analytical skilled jobs needed, becoming a serious national problem.

The fact is that the labor force composition has changed, and the workers pool is very diverse. The workforce consists of employees who have gender, age, and generational differences (Seago, 2016). Several different and distinct generations are currently working side by side, and their differences have started to put pressure on the

workplace to adapt (Behie& Henwood, 2018). In addition to hard skills, all jobs require general (“soft”) skills to succeed (Dean, 2017).

The new digital generation is prepared to add a high level of technology to the workforce however, is being evident that the automation and proliferation of technology are weakening their ability to create and/or maintain interpersonal relationships and to develop people skills, creating a generational gap that affect their professional and personal lives. No matter how competent the individuals are with the technical (“hard”) skills, they will not success in the actual occupational environment if they don’t possess social and analytical skills to properly communicate and interact with colleagues and clients.

According to Forbes Coaches Council the top 10 soft skills are: empathy, ability to influence peers, emotional intelligence, curiosity and positivity, active listening, humility, communication skills, creative problem-solving, resilience and observation skills (Donaldson, 2019). Employers are starting to give more value to soft skills since their deficiency cost them loss of money. Several articles identified that the most popular soft skills that employers are looking when hiring are dependability, positive attitude, self-motivated, team-oriented and strong work ethic (ARMazzotta©, 2015). In addition, the following skills were also identified as those most commonly preferred by employers: communication, flexibility/adaptability, time management, empathy, attention to detail, self-confident and ability to deal with pressure or criticism (Williams, 2015; Nguyen, A., 2017). Kennedy, 2019 said that organizations are currently focusing in three main soft skills: critical thinking, creativity and leadership. In 2020 a list of 5 most in demand soft skills has been released by LinkedIn with a ranking of: creativity, persuasion, collaboration, adaptability and emotional intelligence (Brudner, E., 2020). Today’s young workers are increasingly likely to have significant weaknesses in at least one, but usually several, soft skills. Bhuiya (2019) affirmed that the top 5 most lacking soft skills in the US new workforce are: critical thinking/problem solving, attention to detail, communication, leadership and teamwork. The good news is that they can be taught and learned as well as hard skills. There are college courses, continuing education programs, and self-help resources designed to help in identifying strategies to improve each of these skills, but this is not enough. Many employers are offering trainings and seminars to address the skills gap, but they can’t solve this issue alone, they need support from education systems to build talent pools with skills relevant to today’s business (Burner et al, 2019). A recent study conducted in high schools’ settings revealed that the schools that develop soft skills produced students with higher grades, fewer absences and fewer disciplinary problems and arrests, and graduated in higher numbers (Barshai, J., 2020). It’s imperative that they can be integrated as part of the school’s official curriculum education.

In 1918 Mann’s study on engineering education established the rule of 80/20 demonstrating that approximately 80 percent of success is due to soft skills while 20 percent is due to hard skills. Research developed by Harvard University, the Carnegie Foundation and the Stanford Research Center has revealed that 85% of an engineer's job success depends on their soft skills, while hard skills only provide 15% remaining (NSSA, 2015). “The scientific and technological knowledge of a professional leads him to the door of employment, but it is his effective communication skills and management of emotions that determine him to get and keep the job” (J.E. Tacoronte, Technical University “Vargas Torres”, Ecuador, personal communication). The educational institutions have been ignoring this for more than 100 years, assuming incorrectly that the students possess those skills learned from family or life experiences and focusing only in teaching the hard skills (NSSA, 2017). The actual education system in US is not considering the needs of the working world. Schools’ are emphasizing on teaching hard skills because they are easier to measure and standardize, and they are failing to equip the students for the world of work since most of the new graduates are deficient in soft skills and consequently are not successful in getting hired or keeping their jobs. With the change in our economy from industrial to technology-knowledge, and the advance of developing artificial intelligence, automation and robotics, the demand of a workforce with strong unique human soft skills is growing as well. It’s vital that our educational system include teaching soft skills in their programs to cultivate not only hard but soft skills developing a well-rounded workforce for the future. By adding this important element to instructional plans and classroom expectations, educators help prepare students for success after graduation (Greene, 2016). Burner et al (2019) said that education system has done little or nothing to help address the skills shortage issue. The dramatic transformation in global economies brings costs as well as benefits to the US, hence why we need to re-evaluate the skills we equipped our new workforce generation with to close the gap and avoid the outflow of young talent.

The crucial thing is to realize that both “hard” and “soft” skills are equally important, and they are not in competition, they complement each other. Developing only one set of skills is not enough, both need to be cultivated

and trained to fulfill the variety of skills needed to be a complete and productive professional with high performance in a highly competitive global economy. With the best of both, success is definite.

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