

*Competencias laborales: consideraciones para los
ingenieros industriales*
*Labor competences: considerations for industrial
engineers*

Carlos Alejandro Díaz- Schery

Universidad de Guantánamo, Cuba

Correo electrónico:cdiaz@cug.co.cu

Recibido: 20 de abril de 2018

Aceptado: 12 de junio de 2018

Resumen: Las competencias laborales permiten un desempeño exitoso en una labor o profesión al armonizar efectivamente los conocimientos, las aptitudes, las habilidades, los valores y las actitudes en un espacio determinado. El objetivo de la investigación fue conocer las percepciones en torno a las competencias laborales como herramienta teórica desde la perspectiva de dotar de conocimientos a los estudiantes de la carrera de Ingeniería Industrial para el éxito en la articulación de las alternativas para mejoras en la productividad del trabajo y los resultados en las organizaciones.

Palabras clave: Competencias en ingeniería industrial; Competencias laborales; Productividad del trabajo; Aptitudes y actitudes

Abstract: Labor competences allow a successful performance in a profession by effectively harmonizing knowledge, skills, abilities, values and attitudes. The objective of the research was to know the perceptions about the labor competences as theoretical tools from the perspective of providing knowledge to the students of the Industrial engineering major for the success in the articulation of alternatives for improving work productivity and results in organizations.

Keywords: Industrial engineering competences; Labor competences; Labor productivity; Abilities and attitudes

The literature reflects consensus among researchers about the notion of competences originated in the language sciences, particularly presented by Noam Chomsky in 1965 in his book *Aspects of the theory of syntax*, in which he defines linguistic competences as a relationship between performance and capabilities.

Although the expression can lead to different meanings, competence focuses on the context of a person's performance. According to Pérez (2017) "competences are mixtures obtained from the complete mixture of fuzzy sets of stores of aptitudes and attitudes that employees

have in a general or singular way" (p.56).

On the other hand, organizations are a group of people who carry out activities for the achievement of planned objectives and the strength that sustains it is precisely in these people, in their knowledge, in their abilities, in their capacities, and in their degree of personal commitment to the organization.

For the training and development of labor competences in Cuban organizations, it is increasingly necessary to focus on the promotion of distinctive capacities, on the know-how of the individual, on the development of individual, group, organizational and even inter-organizational knowledge that structures and gives sense of those ways of making distinctive and difficult to imitate (Drucker, 1993)

Competences are integrated in the dynamic and developer context stated by the Guidelines of the Economic and Social Policy of the Party and the Revolution, the Cuban economic and social model of socialist development, and the national plan for economic and social development until 2030.

Competences are broader and more diffuse entities than traditional psychological constructs. They combine something that concepts tend to isolate (knowing the artificiality of separation): the cognitive (knowledge and skills), the affective (motivations, attitudes, personality traits), the psychomotor or behavioral (habits, skills) and the psychophysical or psychophysiological.

We can not fail to see the holistic condition of labor competencies, which takes into account psychology and the person as a whole or bio-psycho-social unit, benefiting the management strategies of human resources assumed, in particularly those related to the selection of personnel, training, performance evaluation and workers' compensation. (Cuesta, 2010)

According to Cuesta (2001), successful behaviors constitute the support on which competencies will be built, since it is from the way that outstanding talent or people carry out their tasks, that we interpret what characteristics underlie these behaviors, what knowledge it puts into play, what skills it has developed, what attitude accompanies these actions and what moves it to act. It is with this aim that we "disarm" the behaviors of

successful people, to understand what they are made of and thus identify the behaviors that distinguish people who exhibit superior performance with respect to those of average performance.

We denominate "competences" to these successful behaviors. Labor competences have become the basis for the management of personnel and for the standardization of educational and work processes. In the world of work you can see this reflected in the quality standards and standardizations that are required within the description of positions that each worker must have to meet the requirements of the job profile, and organizations look for within the human resources process that the recruitment, selection, induction, training and evaluation of personnel is focused on labor competences.

In scientific literature, competences are classified in different ways: Key or essential competences are a set of characteristics that make a company or corporation competitive. (Tobon, 2009). Labor competences: are a synergic set of knowledge, skills, experiences, feelings, attitudes, motivations, personal characteristics and values, based on the demonstrated suitability, associated with a superior performance of the worker and the organization, in correspondence with the technical, productive and services demands.

It is an essential requirement that these competences are observable, measurable and that they contribute to the achievement of the organization's objectives. (NC 3000: 2007 Integrated Human Capital Management System-Vocabulary). Professional competence: the mobilization of knowledge, skills and professional attitudes necessary for the performance of typical activities or functions, according to the standards of quality and productivity required by the nature of the work. Professional competences include basic competences, specific competences and management competences. (SENAI, 2002).

Basic, generic, and specific competences (Vargas, 1999)

- Basic competences: These are fundamental competences for living in society and working in any work environment, enabling the analysis, understanding and resolution of problems of daily life. They also constitute a central axis in the processing of information of any kind.

- **Generic competences:** These are competences common to several occupations or professions.
- **Specific competences:** These are competences specific to a specific occupation or profession.

The industrial engineering major is compromised with generic competences because it allows teamwork and adaptability in the medium taking into account that today the strength of organizations comes from their people and the challenge is, precisely, to train and integrate a good team of work.

The professional competences of the students of the Industrial Engineering major are related to:

- Diagnosis, design, operation, control and improvement of production processes and services throughout the value chain with the aim of improving levels of efficiency, effectiveness and sustainability, considering, with a systemic, integrative and humanistic approach, the characteristics and interrelations between materials, human resources, knowledge and information, financial, energy and equipment, and preserving the environment.
- Collection of data from a process, application of statistical modeling techniques and information technologies to gain knowledge about it and reflect it in reports capable of sustaining decisions that lead to success, as well as to the solution of problems associated with processes of production or service.
- Interpretation and application of the main regulations of the country in its field of action, as well as the norms and recommendations of different international organizations such as: International Organization for Standardization (ISO), International Labor Organization (ILO), World Health Organization (WHO), World Trade Organization (WTO) and International Electrotechnical Commission (IEC).
- Assimilation, application and communication efficiently, orally and in writing, of the new technologies related to the specialty.
- Contribution to the training of human resources in the field of Industrial Engineering.

The knowledge and development of competences by these students will enable graduates to diagnose, design, operate, control and improve production processes and services throughout the value chain with the aim of achieving effectiveness, efficiency and sustainability, and consequently, better productive results in the provision of services in social-state companies.

Bibliographic references

Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge: The MIT Press.

Cuesta Santos, A. (2001). *Gestión por Competencias*. La Habana: Academia.

Cuesta Santos, A. (2010). *Tecnología de la Gestión de los Recursos Humanos* (3ra ed. correg. y amp.). Habana: Félix Varela y Academia.

Gallego, R. (1999). *Competencias cognoscitivas: un enfoque epistemológico, pedagógico y didáctico*. Bogotá: Cooperativa Editorial del Magisterio.

Pérez Capdevila, J. (2017). *Definición, medición y mapas de competencias laborales*. Cuba, Santiago de Cuba: Universidad de Oriente.

Tobon, S. (2009). *Formación basada en Competencias*. Bogotá: Ecoe Ediciones.

Vargas, F. (1999). *La formación de Competencias: una opción para mejorar la capacitación*. Bogotá: ANDI.