

Keys to competency-based education in Cuban universities

Javier Pérez Capdevila^{1*} <https://orcid.org/0000-0002-7159-3072>

¹Ministerio de Ciencia, Tecnología y Medio Ambiente, Cuba

*Author for the correspondence: capdevila@gtmo.inf.cu

ABSTRACT

Competency-based university education is a process whose objective is the acquisition of professional competencies, which presents difficulties that have a negative impact on the graduate's work environment. Therefore, the purpose of this essay is to highlight the importance of competency-based training and to analyze the latent and evident difficulties that affect it at the national level. Methods such as in-depth interviews, data analysis, case studies, debate and critical analysis, made it possible to detect the causes of these difficulties that affect the training of competent professionals at the time of graduation from the university.

Keywords: Competency-based education; Professional competencies; University education; Labor competencies; Professional performance.

Introduction

The completeness and rigor of the publication manual of the American Psychological Association (APA) is well known and, therefore, it is the one most commonly applied in scientific publications and I have chosen it to write this essay.

According to *the American Psychological Association* (2020), in relation to the use of pronouns in first or third person in scientific documents (books, theses and articles among others) it states:

To avoid ambiguity in attribution, use the first person rather than the third person when describing the work you did as part of your research and when

expressing your own opinions. If you are writing an article by yourself, use the pronoun "I"; do not use the pronoun "we" to refer to yourself if you have no coauthors. (p. 76)

Having clarified the above and entering into the subject that occupies me in this essay, I consider that, currently one of the most significant debates in the field of higher education is competency-based training. And this is due to the fact that universities have the obligation to graduate highly competent individuals professionally to serve society.

Competency-based education in universities refers to an educational approach that seeks to develop practical skills and knowledge in students so that they are prepared to face the challenges of the world of work. Instead of focusing on the transmission of theoretical knowledge, it also seeks that students acquire skills and abilities to be able to apply what they have learned in real situations. This is achieved through active learning methodologies, teamwork, projects and internships, among others.

Competency-based training also focuses on the development of soft skills, such as communication, critical thinking, leadership and problem solving, which are essential for success in any career. By preparing students to meet the challenges of the world of work, competency-based training helps improve graduates' employability and increase their ability to adapt to changes in the labor market.

Professional competencies in particular have been studied by a large number of authors (as well as labor competencies in general), however, it is not quantified how much negative and how much positive has been generated by this practice, but what is evident is that the proliferation of so many definitions has generated a polysemy in the definiendum based on the wishes of each author without any of them substantiating the reason for the definien they propose.

From what has been said, it can be deduced that in order to be able to write about labor competencies (which in short is the most generalizing definition and the rest emanate from it only adjectivizing the term according to the context), each author must adhere to a specific definition.

In this essay I embrace the one elaborated by Pérez Capdevila (2017) who defines labor competencies with this statement:

They are mixtures obtained from the complete mixture of the blurred sets of skills and attitudes possessed by employees in a general or singular way. In these mixtures, the degree of membership expresses the extent to which these competencies are possessed (p. 56).

From my position as the author of the above definition, I explain that it generalizes and in turn synthesizes the elements contributed by those that preceded it and, as a singular element, it contributes a mathematical method of research that answers how to measure competencies. In this sense, it should be emphasized that in order to build competencies, the aptitudes (ability to do) and attitudes (willingness to do) that people must possess must be taken into account.

Following the above idea, universities must identify the sets of aptitudes and attitudes that must be developed in future professionals as a guarantee that they will graduate as competent people for the profession they have been trained and that they will have to carry out effectively. That is why this essay intends to highlight the need to train by competencies and to analyze the latent and evident difficulties that affect this training.

Development

Competency-based training at the university is a teaching and learning process aimed at acquiring the skills, knowledge and abilities necessary to achieve the goals of the organization or institution. These competencies require attitudes to formulate diagnoses and make proposals for improvement at all levels, they require autonomy, independence of spirit and analytical skills based on knowledge.

On the other hand, this type of training implies the development of skills, abilities and knowledge that must be articulated with learning from school and the demonstration of the same in the workplace. Therefore, it is necessary for the university to incorporate competency-based training to prepare students for job performance. The university should also offer flexible programs so that students can acquire specific competencies through competency-based training. This will allow students to acquire new skills quickly and efficiently so that they can perform their jobs successfully.

The university presents several difficulties in relation to competency-based training. One of the main ones is the incomplete implementation of active learning methodologies, as they require a great deal of time and resources to be effective. In addition, professors often find it difficult to adapt their teaching to this approach, as they are generally used to teaching in a traditional way. They also find it difficult to

measure the success of competency-based training, as learning objectives can be more complex to assess than the usual learning objectives.

Another difficulty is the lack of resources for the implementation of projects and professional practices, since these in the current socio-economic conditions require a great effort to be organized and supervised. It also becomes difficult for students to adapt to this form of learning, especially since they are used to a more traditional learning approach. Finally, the assessment and measurement of competencies can be complicated, as it can be difficult to measure soft skills and transversal competencies.

The lack of professional competencies in university graduates is a recurring problem that affects many careers and professions. Often, students focus on acquiring minimal theoretical knowledge and do not develop among their skills those practical skills that are essential to succeed in the world of work. This is due to a traditional educational approach that focuses on the transmission of knowledge and not on the development of professional skills.

As a result, students do not have the opportunity to apply everything they have learned in a real work environment, which hinders their ability to adapt to the world of work once they graduate. This negatively affects their level of employability and their ability to play an effective role in the world of work.

It is increasingly difficult to ignore the doubts expressed by the population about the professional competencies of university graduates, which in the global context has become a central aspect of doubts about what the future society will be like. Hence the importance of the topic to be addressed in this essay, which aims to highlight the difficulties in competency-based training based on the identification of skills and attitudes that should be trained and the absence of methods to develop them from higher education. All this under the hypothesis that this identification and the knowledge of the mentioned methods will have direct positive impacts on this type of training.

In the last three decades, many researchers have tried to build and apply competency-based training models, emphasizing the context of higher education, where a considerable amount of scientific literature has been published on the subject as evidence of the importance attached to it; however, practice shows the shortcomings of these models through the usual perception of lack of knowledge, inadequate behavior in the exercise of the profession, cultural deficit or, in short, manifest mediocrity in a significant number of university graduates.

In accordance with the reasoning I have been making, it should be noted that there is a notable growth of pseudoscience in the scientific literature, which is an expression of the existing weaknesses in professional competencies.

One cause of the professional rickets to which I refer lies in the demands on the university professor to comply with certain indicators in order to have a satisfactory evaluation of his teaching work, which are known as efficacy and efficiency of the teaching-learning process. The first is the percentage of passing grades with respect to the initial enrollment of the course, that is, promotion versus enrollment; and the second is the average of the grades of all students.

Another cause is the favorable correlation that is desired between the students' results and the evaluation of the teacher's work, without taking into account that the teacher is one and the students are others, that is, in reality they are people with different motivations, tastes, feelings and values; it is not enough that the teacher wants to teach but it is also necessary that the student wants to learn, it is not enough that the teacher knows how to teach but also that the student knows how to learn. All of the above, while recognizing that teachers are not equipped with all the instruments for professional competency-based training.

And a final cause that I will mention is that in recent years a worrying trend has emerged in which students receive less and less content during their studies. This may be due to various factors, such as the lack of resources in educational institutions, the precariousness of education and the growing demand for university degrees.

When students are victims of the above, they are affected in multiple aspects. On the one hand, their academic training is reduced, which can negatively affect their ability to face the challenges of the labor market. In addition, students may experience a decrease in their motivation and commitment to education, as they do not see a return on their investment of time dedicated to their university studies.

Ultimately, the reduction of content in university education can have a negative impact on the economic and social development of the nation. If students do not receive adequate training, problems will proliferate in the quality of professionals and the capacity for innovation in the different sectors of the country. Therefore, it is important that educational institutions, governments and society in general work together to ensure a quality university education that is accessible to all.

Conclusions

The implementation of competency-based training in the national education system presents some latent and evident difficulties. Among the latent difficulties are the resistance to change on the part of some teachers and the lack of resources and training to implement this approach effectively. Among the evident ones are the lack of coherence between the curricula and the competency profiles required by the labor market, as well as the lack of rigorous evaluation of learning outcomes.

Competency-based education is an important educational approach to prepare students to face the challenges of today's world. However, its implementation requires a joint and coordinated effort to overcome the latent and evident difficulties that affect it at the national level. This is the only way to ensure that students acquire the necessary skills and abilities to succeed in today's world of work and society.

To overcome these difficulties, a joint effort is needed from the different actors in the education system: teachers, school administrators, students and their families, as well as the business sector and government authorities. It is necessary to provide adequate training and resources to teachers so that they can implement competency-based training effectively, and it is also necessary to establish greater coordination between the different educational levels and the world of work to ensure that competency profiles are consistent with the needs of the market.