



Review article

The orientation of learning in the formation of university competences through the didactic book

La orientación del aprendizaje en la formación de competencias universitarias a través del libro didáctico

A orientação da aprendizagem na formação de competências universitárias por meio do livro didático

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ABSTRACT

The treatment of the term competencies, and the attempt to apply it to education, has reached such levels in the present millennium that have resulted in a wide and diverse conceptual network that becomes approaches and conceptions that renew the significance of these and their implication in the training of the future professional. The article aims to theoretically analyze the importance of the competency-based curriculum in the current context, taking the didactic book as a guide in the orientation of developer learning. The study was based on all the theory of the historical-cultural approach and the developer didactics, with the use of the historical-logical method and analysis-synthesis as a procedure; The value attributed to the training of competencies in the university and the need to favor this training from the orientation of learning with the use of media, especially didactic books, were weighted in it. The main results show that professional skills cannot be reduced to knowledge or know-how, a curricular design is required that guarantees the comprehensive and flexible preparation of the student, through the promotion of developer learning from the orientation of learning through didactic book

Keywords: competencies; Higher education; training; didactic book; didactic media.

RESUMEN

El tratamiento del término competencias, y el intento por aplicarlo a la educación, ha alcanzado en el presente milenio niveles tales que han derivado en una amplia y diversa red conceptual que deviene en enfoques y concepciones que renuevan la significación de estas y su implicación en la formación del futuro profesional. El artículo

tiene como objetivo analizar teóricamente la importancia del currículo basado en competencias en el contexto actual, tomando el libro didáctico como guía en la orientación del aprendizaje desarrollador. El estudio se sustentó en toda la teoría del enfoque histórico-cultural y la didáctica desarrolladora, con la utilización del método histórico-lógico y el análisis-síntesis como procedimiento; se ponderó en el mismo el valor que se le atribuye a la formación de competencias en la universidad y la necesidad de favorecer esta formación desde la orientación del aprendizaje con el uso de medios, especialmente libros didácticos. Los principales resultados muestran que las competencias profesionales no se pueden reducir a un saber o saber-hacer, se requiere de un diseño curricular que garantice la preparación integral y flexible del estudiante, mediante la promoción de aprendizajes desarrolladores desde la orientación del aprendizaje a través del libro didáctico.

Palabras clave: competencias; Educación Superior; formación; libro didáctico; medios didácticos..

RESUMO

O tratamento do termo competências, e a tentativa de aplicá-lo à educação, atingiu tais níveis no presente milênio que derivaram de uma ampla e diversificada rede conceitual que se transforma em abordagens e concepções que renovam seu significado e sua implicação na educação. futura formação profissional. O artigo tem como objetivo analisar teoricamente a importância do currículo por competências no contexto atual, tomando o livro didático como guia na orientação da aprendizagem do desenvolvedor. O estudo baseou-se em toda a teoria da abordagem histórico-cultural e na didática do desenvolvedor, com a utilização do método histórico-lógico e a análise-síntese como procedimento; Pesaram nele o valor atribuído à formação de competências na universidade e a necessidade de favorecer

essa formação a partir da orientação da aprendizagem com o uso de mídias, principalmente livros didáticos. Os principais resultados mostram que as competências profissionais não podem ser reduzidas ao saber ou ao saber fazer, é necessário um desenho curricular que garanta a preparação abrangente e flexível do aluno, promovendo a aprendizagem do desenvolvedor a partir da orientação da aprendizagem através do livro didático.

Palavras-chave: competências; Educação superior; Treinamento; livro didático; material didático..

INTRODUCTION

The review or systematization of references, which has been carried out on the term competencies as part of the research, especially in the field of pedagogy and didactics, has allowed us to appreciate the diversity of criteria that coexist around the subject. Apart from the existing controversy in this regard, it is concluded that the in-depth and permanent study of this term by teachers who work in the university context is pertinent. In the last three years there has been a boom in its approach as a central element in the socialization of research; Proof of this are the shared criteria of authors such as: Amador (2018), Cañadas (2019), Mugarra (2019), Rodríguez (2019), Medina, (2019), Almerich (2020), Cueto-Marín (2020) and Olazábal, (2020).

The competencies appear, first of all, related to the productive processes in the companies, particularly in the technological field, where the development of knowledge has been very accelerated. Hence, they have been initially addressed as labor competencies; their conceptualization has been as diverse as the meanings that have been attributed to them in the attempt to

transfer them to education: "In the literature, various definitions and practical applications of competencies have been distinguished, most of them related to predictive actions, preparation, selection and evaluation of professionals with successful performance in productive organizations and in the educational environment" (Peña, 2017, p. 95).

With regard to the application of this concept to the educational field, it can be seen that its treatment responds to the multiple influences of today's society, which is why it obeys various types of needs that become a challenge for universities; achieve quality and relevance in the training of professionals to face technological development and other challenges posed by today's society, which has led to the reformulation or restructuring of the curriculum in terms of competencies in the vast majority of models or curricular conceptions designed in the last years.

In the study carried out, it is observed that a large number of theorists, when addressing competencies in the educational field, emphasize the individual (psychological approach), while others ponder their mobilizing function in an activity situation; It is considered that this simplifies this category, which in its essence becomes so complex, as it expresses a relational and dialectical link between the knowledge and learning acquired by the individual and their ability to integrate them in a given context, in order to solve any problem of creative and innovative way.

Medina (2019) states that: "Most of these theorists have agreed that they are developed in action, they are gradually built to the extent that students appropriate a set of knowledge and involve different capacities for professional performance and Therefore, they imply the putting into play of a scale of values that gives them meaning within each specific context" (p. 4).

From this perspective, the concept of competencies in education is presented as a broad conceptual network, which refers to comprehensive training; In this sense, competence cannot be reduced to simple job performance, nor to the mere appropriation of knowledge to know how to do, but rather encompasses a whole set of capacities that are developed through processes that lead the responsible person to be competent. to carry out multiple actions (social, cognitive, cultural, affective, labor, productive, directive) by which he projects and demonstrates his ability to solve a given problem, within a specific and changing context, where reality is constantly transformed and the resolution of concrete problems is subjected to high doses of creativity.

Consequently, with the objective that is pursued with this work: to theoretically analyze the importance of the competence-based curriculum in the current context, taking the didactic book as a guide in the orientation of developer learning, the formation of competences in university education is pondered. This responds to the increasingly growing need to train with quality (determined by the transformation into a professional during the degree) and relevance (given by the social and ethical responsibility with which the professional is trained) to the graduates who have the mission of interpret, argue and transform a socio-labour context that is becoming increasingly complex; maximum expression of the development achieved by science and technology.

All this analysis leads us to recognize in the competence-based curriculum and designed from a conception that is based on scientific and developer didactics the possibility of achieving a competent professional, while this conception fosters a developer learning that emphasizes constant reflection. of the student, about their learning styles and strategies through the use of didactic media or resources; which undoubtedly allows it to

transform itself and its context in a creative and innovative way.

The criteria of Freire (2018) is shared in this proposal when considering relevant "The importance of structuring the appropriate curricular design for the application of educational processes in the classroom, this is argued as the recurring need that exists today to improve educational quality" (Freire, 2018 p. 77).

The authors argue that:

This praxis points out the integral formation of critical, reflective and purposeful human beings; based on a flexible and adaptable curricular axis to the educational needs of the environment with the application and use of didactic resources that implement the student's activity as a fundamental axis of the process (p. 77).

These and other reflections indicate that the formation of competencies is increasingly weighted in the educational context, which leads us to theoretically analyze the importance of the competency-based curriculum in the current context. Taking the didactic book as a guide, the use of didactic means in the orientation of developer learning is supposed to be relevant in this intention, while it is visualized as a mobilizing element of the development of the subject in formation, which is why both ideas are assumed as the guiding thread of this work.

DEVELOPING

In the treatment of the term competencies in educational research in the last two decades in Cuba, the works that authors such as García (2013) have developed from the theory stand out; Pena (2017); Lover

(2018); Gamboa Graus, ME (2019); Aldana, J., Salón, M. & Guzmán, N. (2019); Olazabal (2020), among others.

We agree with Olazábal, (2020) in that:

Today it is evident that the university, as a training center for competent professionals, is undergoing significant changes that bring with it new responsibilities and demands on its teachers and that such transformations compel the in-depth study of the issue of training competencies (p. 517).

From what is systematized in terms of professional competencies, it is recognized that these cannot be reduced to knowledge or know-how, while the individual, when performing, puts into play or integrates all the knowledge acquired in order to resolve any situation that arises, which allows him to know how to chain a set of processes among which the emotional ones cannot be ignored, expressed in the form of reactions, decisions, behaviors that are shown in his actions.

Keep in mind that these are continuously acquired and developed and that education and all the experience that the individual obtains in his daily life contributes to this; however, it is recognized in the formation of competencies, taking into account the particularities of contexts and cultures, a mobilizing element that favors the possibility of giving creative and innovative responses to problematic situations that the individual faces in their work.

The formation of competences in the university from a developer didactics

For his part, Castaño (2018) states that:

Universities, in order to meet the new challenges demanded

by higher education, must have a good academic, administration, research and management structure, which corresponds to the needs of the regional, national and international context and with the criteria required for the high quality, to be recognized (p. 143).

It is considered that this will promote the impact of graduates on the environment, institutional well-being, organization and management of physical and financial resources. It is recognized that these new challenges demand improvements in aspects related to academic processes in university institutions "With the comprehensiveness and flexibility of the curriculum, interdisciplinarity, the organization of academic activities and the resources used by teachers and students" (Castaño 2018, p.143).

Regarding these elements, these authors state that " *they* must be improved in response to national and international advances, labor needs and educational policies, adapting them according to the conditions offered and the context of application" (Castaño 2018, p. 143).

For this, the importance of making proposals in the university scenario that take into account that "Subjects are inserted in a variability of situations, contexts, cultures, which require collaborative work with the constant challenge of recognizing and respecting diversity through dialogue in reflective and critical spaces with the perspective of building new knowledge" (Lazo, 2019, p. 456).

It means as an accurate way out in the intention of achieving the objectives and goals that are projected in the university environment a curricular design that guarantees the comprehensive and flexible

preparation of the student, focusing or simulating adequately the problems they will face and offering the greatest number of resources. didactic based on analyzing, interpreting, reflecting, arguing and solving in a creative way the problems that arise in their professional performance, even when they have not been contemplated in the training.

Developing Didactics can contribute to this endeavor, as it recognizes the scientific direction by the teacher of the cognitive, practical and evaluative activity of the students, taking into account the level of development reached by them and their potential to achieve it. It assumes that during processes of socialization, communication and self-reflection, cognitive independence and appropriation of the teaching content are fostered, forming a reflective and creative thought that favors the personal assessment of what is studied. For this, it stimulates the development of strategies that allow regulating the ways of thinking and acting from a developer learning.

As part of this analysis, it is considered necessary to signify the Moncayo (2020) criterion regarding developer learning, by stating that:

It is the one that guarantees in the individual the active and creative appropriation of culture, promoting the development of their constant self-improvement, their autonomy and self-determination, in close connection with the necessary processes of socialization, commitment and social responsibility (p. 251).

In the studies of a Collective of authors (2018) presented through the book *Learning*,

training and education in competences, it is summarized that:

The different innovations and reforms that are being carried out in education have as their center the competency-based training approach, which has an impact on the management of the curriculum in the quality policy of education, in teaching and in the different evaluation processes (p. 2).

Being consistent with this approach means concentrating training efforts on the development of skills to display the student's critical and reflective capacity.

The criteria of the authors are shared (Casimiro, 2019):

The competences constitute the source of the innovative experiences in the IES, since it seeks to break with the routine and coexist with the profound changes of society and of the organizations or institutions of higher education impacted by globalization, exclusion, inclusion, the multiculturalism, heteronomy, autonomy and sustainable development, among the categories that emerge to find a place in the curriculum (p. 314).

Based on the logic of what was stated by these authors, it is considered that university education must contain spaces for strategic analysis; synthesis of knowledge, skills, values and attitudes within the framework of historical-social relevance, and the ability to organize tasks and face unforeseen situations in order to formulate projects that enable the articulation of science and research to technological change in the sectors industrial and services.

It is then necessary to consolidate the student's autonomous work in carrying out learning tasks that promote metacognitive reflection. For this, it is necessary to promote the achievement of reading, writing, verbal expression, listening and mathematics skills; skills to use writing for communication and creation purposes; skills for the use and management of information systems; classify and interpret any information.

A particular reflection from the conceptualization of the competencies allows us to recognize in terms of their training, the need to make permanent adjustments and demonstrate balance in the face of changes that occur in the environment, for which the design and curricular development of competencies constitutes a facilitating model. with multiple benefits.

For this, it is necessary to weigh scientific research by continuously identifying what is necessary to do from the dynamics that characterize the context, to achieve these permanent adjustments. Refers Luján Villegas, DM & Londoño Vásquez, DA (2020) that "scientific competences refer to a process that allows understanding the theory from a humanist vision" (p. 2). Giving reason to this vision leads to projecting a training that responds to both theory and practice; in a flexible, contextualized and significant way, which impacts its participants, since the research goes beyond the curricular and is gestated from the realities and social and cultural conditions of those involved.

It is concluded, then, that the training of skills for Higher Education is an option that seeks to generate higher quality training processes, but without losing sight of the needs of society, the profession, disciplinary development and academic work. For this reason, the term competencies is used focusing on the integral development of the person, according to the context in which they operate, thus allowing them to perform consistently, in accordance with the

demands posed by the profession and, consequently, with the demands of current and future society.

The didactic book as a guide for developer learning in the formation of competencies

Generating higher quality training processes in Higher Education implies that educational institutions consistently promote actions in the pedagogical and didactic fields, which translate into real modifications of teaching practices.

To this is paid that educators take into account when considering an objective or goal, the fundamental role played by learning strategies and the integration of objectives, activities and resources within the framework of didactic planning.

Another element that is proposed to be considered for the achievement of the proposed objective or goal is the management of "a communicative process that emphasizes the active-creative role of the university student. For this, the educator must facilitate their active participation, guiding it towards the transmission of needs, interests, expectations and concerns at all times of interaction" (Lazo, 2020, p. 196).

Regarding teaching resources or means as transcendental elements in the organization of learning, there are a diversity of approaches in the consulted literature, especially in the approach to teaching resources, for which various terms are used such as: teaching means, didactic means, teaching resources, teaching aids. It is not the intention in this material to assume any particular conceptualization or classification. Reference is only made to those elements that are of interest to the investigation and among which there are points of contact that make clear the position that is assumed, in order to form a proposal that is

understandable and applicable to educational practice.

In relation to the use of resources (media), and among them the didactic book, the criteria of authors such as Fernández Palop, MP & Caballero García, PA (2017) are recognized. They argue that they are powerful from the expressive point of view because they are capable of transmitting complete content and are not used in conjunction with the teacher's action; It also recognizes that the concepts are fixed in them and the contents that have been presented in class are extensively developed (p. 16).

When addressing learning competencies and strategies in their writings, Fernández (2017) and Gamboa (2018, 2019) emphasize the importance of promoting the use of dynamic and interactive media that favor active participation and teacher-medium-student interaction. for the development of the developer teaching-learning process.

The previous criterion is shared and the ideas of Vargas (2017) are recognized in terms of didactic resources when addressing these as a set of material means that intervene and facilitate the teaching-learning process, which can be both physical and virtual. According to these authors, these should arouse the interest of the students and adapt to their physical and mental characteristics, facilitating the teaching activity, by serving as a guide and adapting to any type of content.

It is in our interest to emphasize this classification, while the specifics of what we have considered as a didactic guide book for developer learning in the formation of competencies will be addressed, particularly designed for the Financial Mathematics subject in the Accounting and Finance career in the University of Pinar del Río "Hermanos Saíz Montes de Oca", which is taught in the second semester.

In relation to the use of resources (media) and among them the didactic book, the criteria of authors such as Fernández (2017) are recognized. He argues that they are powerful from the expressive point of view because they are capable of transmitting complete content and are not used in conjunction with the teacher's action. He also understands that the concepts are fixed in them and the contents that have been presented in class are extensively developed (p. 16).

It is considered that the contents that appear in a didactic book as a developer learning guide must respond to the ideas discussed above and must lead the student to a permanent process of reflection and critical analysis of each of the situations raised and lead him to recreate new ones. situations from metacognitive actions; In essence, they must constitute a guiding basis for the learning activity in the student's training, having the subject program as a starting point, to carry out the management process of this activity.

The didactic book must be prepared by the teacher responding to the previous requirements, motivating and arousing the interest of the students to transform their learning styles, from the continuous reflection of these regarding their learning, in a self-critical and reflective way. These didactic books can be applied to university degree programs in all modalities.

It is suggested to use other resources or tools that promote this process of continuous reflection from the proposal of tasks and actions that systematically respond to the proposed objectives and their evaluation as a process that also involves the teacher; consequently, the use of the electronic portfolio is proposed. It is considered that the use of the electronic portfolio constitutes a tool for the development of the reflective practice of the teacher, since it provides spaces for feedback on the educational

experience itself and appreciates a diversity of knowledge and knowledge within the different spaces where he develops his pedagogical work. (Vega, M. & Appelgren, D., 2019).

This must respond to the characteristics of the didactic guide or program of the subject and, therefore, show a logical sequence that leads the student to delve into the teaching content in a gradual manner.

The didactic book was elaborated on the basis of a common thread of thematic progression, imposing an order, hierarchy and interrelation of ideas to facilitate their understanding, by recognizing the axis of relationships that articulate them.

Consequently, this didactic medium responds in a clear, precise and specific way to a need of a pedagogical and didactic nature, presenting a structure in relation to it, for the distribution and organization of the learning contents (knowledge, skills, values and attitudes to be promoted), which meets the learning objectives and its logic.

CONCLUSIONS

Professional skills cannot be reduced to knowledge or know-how, as long as the individual, when performing, puts into play or integrates all the knowledge acquired in order to solve any situation that arises, which allows him to know how to chain a set of processes among which the emotional ones cannot be ignored.

The training of competencies is increasingly weighted in the educational context, which leads us to theoretically analyze the importance of the competency-based curriculum in the current context, taking the didactic book as a guide.

The orientation of learning through the didactic book favors to a great extent the formation of competences in the university context, while it promotes a developer learning from the critical, creative and purposeful reflection of the student about their learning styles and the reality in the which is inserted

BIBLIOGRAPHIC REFERENCES

- Aldana, J., Salón, M. & Guzmán, N. (2019). Liderazgo sistémico en las competencias gerenciales docentes universitarias. *Revista CIENCIAMATRIA*, 5(8), 50-74. https://www.researchgate.net/publication/331739520_Liderazgo_sistémico_en_las_competencias_gerenciales_docentes_universitarios
- Almerich, G.; Suárez-Rodríguez, J.; Díaz-García, I. y Orellana, N. (2020). Estructura de las competencias del siglo XXI en alumnado del ámbito educativo. Factores personales influyentes. *Educación XX1*, 23(1), 45-74, <http://revistas.uned.es/index.php/educacionXX1/article/view/23853>
- Amador, K., Velázquez, A. & Alarcón, P. (2018) Las competencias profesionales del psicólogo desde una perspectiva integral. *Revista de Educación y Desarrollo*. 45, pp1-10. https://www.cucs.udg.mx/revistas/edu_desarrollo/anteriores/45/45_Amador.pdf
- Casimiro, C. N; Casimiro W. H. & Casimiro, J. F. (2019). Desarrollo de competencias profesionales en estudiantes universitarios. *Revista Conrado*, 15 (70), pp. 312-319. Cienfuegos. sept -oct. 2019. Epub 02-Dic-2019.
- <https://conrado.ucf.edu.cu/index.php/conrado/article/view/1143>
- Castaño C. P. y Acevedo, M. (2018). La práctica pedagógica para el desarrollo de las competencias profesionales del educador físico en Colombia. *Mendive.Revista de educación*, 16(1). pp. 140-157. <https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/1189>
- Cañadas, L., Santos-Pastor, M L & Castejón F J. (2019). Competencias docentes en la formación inicial del profesorado de educación física. España: Federación Española de Asociaciones de Docentes de Educación Física Universidad Autónoma de Madrid (FEADEF) *Revista Retos*, 35(2019), pp. 1579-1726. <https://recyt.fecyt.es/index.php/retos/article/view/64812>
- Colectivo de autores (2018). Aprendizaje, formación y educación por competencias Editorial Corporación CIMTED. ISBN: 978-958-5608-1-6. Primera edición. Junio 2018. pp. 2 - 206 <http://memoriascimted.com/wp-content/uploads/2017/01/Libro-CIEBC2018.pdf>
- Cueto Marín, R., Piñera Concepción, Y., & Bonilla Vichot, I. (2020). ¿Competencias, habilidades y desempeño? Apuntes y reflexiones para un debate en la formación pedagógica cubana. *Mendive. Revista de Educación*, 18(3), 702-717. Recuperado de <https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/1927>
- Fernández, Palop, M. P. & Caballero García, P. A. (2017). El libro de texto como

- objeto de estudio y recurso didáctico para el aprendizaje: fortalezas y debilidades. Revista electrónica interuniversitaria de formación del profesorado, 20(1), pp201-217.
<https://revistas.um.es/reifop/article/view/229641>
- Freire Quintana, J. L.; Páez, M. C.; Núñez Espinoza, M; Narváez Ríos, M; Infante Paredes, R. (2018). El diseño curricular, una herramienta para el logro educativo. Revista de Comunicación de la SEECI, (45). pp. 75-86
<http://www.seeci.net/revista/index.php/seeci/article/view/466>
- Fernández, H. & Gamboa Graus, M. E. (2017). Actividades con medios dinámicos para el proceso de enseñanza aprendizaje de los contenidos geométricos. Revista Opuntia Brava 9(3) pp. 258-273
<http://opuntiabrava.ult.edu.cu/index.php/opuntiabrava/article/view/199>
- Gamboa Graus, M. E. (2018). Estrategias de enseñanza aprendizaje. Colecciones Acapulco. Toluca. México pp. 9-25
<http://roa.ult.edu.cu/handle/123456789/3863>
- Gamboa Graus, M. E. (2019). Competencia de dirección en Educación. Estado actual en las Tunas y recursos para su perfeccionamiento. pp. 11-25
<http://roa.ult.edu.cu/handle/123456789/3956>
- García, M.; Ortiz, T. & González, M. (2013). La formación de competencias y la dirección en la Educación Superior, una necesidad ineludible. Revista Caribeña de Ciencias Sociales, (10).
https://econpapers.repec.org/article/ervrccsrc/y_3a2013_3ai_3a2013_5f10_3a06.htm
- Lazo, Y., Márquez, J. L. & Ordaz, M. (2019). La gestión del trabajo educativo en las instituciones universitarias: fundamentos metodológicos. Revista Mendive. 17(3), pp. 454-465, 2019
<https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/1625>
- Lazo. Y., García, M. & Rojas, A. (2020) La comunicación como factor clave en el emprendimiento universitario. Revista Estudios del Desarrollo Social: Cuba y América Latina, 8(3), pp. 191-197,
http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2308-01322020000300002
- Luján Villegas, D. M. & Londoño Vásquez, D. A. (2020). La investigación escolar en educación básica para el desarrollo de competencias científicas en docentes. Revista Praxis, 16(2), pp. 2-8,
<https://revistas.unimagdalena.edu.co/index.php/praxis/article/view/3276>
- Medina, J. A. & Valdés, M. C. (2019). La competencia comunicativa profesionales el contexto universitario y organizacional. Revista Conrado, 15(68).
<https://conrado.ucf.edu.cu/index.php/conrado/article/view/1011>
- Moncayo, O. F.; Cano, J.C. & Bustamente, F. (2020). Pedagogía desde una perspectiva desarrolladora para los docentes de la carrera administración de empresas. Revista Conrado, 16(74), pp. 248-253.

- <https://conrado.ucf.edu.cu/index.php/conrado/article/view/1358>
- Mugarra, C., Bebert G. y Telford, T (2019). Identificación de insuficiencias y acciones tomadas para mejorar las competencias en el trabajo metodológico y educativo de los docentes del Departamento de Morfofisiología de Ciencias Agropecuarias, Universidad de Camagüey, Cuba, *Revista de Investigaciones Veterinarias del Perú*, 30(2). pp. 954-959
http://www.scielo.org.pe/scielo.php?script=sci_arttext&pid=S1609-91172019000200045&lng=es&nrm=iso&tlng=es
- Olazábal Vega, G., & Aguila Carralero, A. (2020). Formación de la competencia investigativa en los Estudiantes de la carrera Licenciatura en Educación Lengua Extranjera Inglés. *Mendive. Revista de Educación*, 18(3), 515-527.
<https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/1979>
- Peña, S. L.; Pérez, M. Morales, C. & Álvarez, M. A. (2017). Formación por competencias en estudiantes de Diseño Industrial. *Revista Cubana de Educación Superior*, 36(2).
http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0257-43142017000200009
- Rodríguez, D. (2019). Transformación de la educación médica cubana ante la necesidad de la formación por competencias. *Revista Inv Ed Med*. 8(32), pp. 123-124
<https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=93537>
- Vargas, G. (2017). Recursos educativos didácticos en el proceso de enseñanza aprendizaje. *Revista Cuadernos*. 58(1), pp. 68-74,
http://www.scielo.org.bo/scielo.php?pid=S1652-67762017000100011&script=sci_arttext
- Vega, M. & Appelgren, D. (2019). E-portafolio: una herramienta para el desarrollo de la práctica reflexiva de profesores en formación. *Revista Praxis*, 15(1), pp. 57-68.
<http://dx.doi.org/10.2176/23897856.2983>
<https://revistas.unimagdalena.edu.co/index.php/praxis/article/view/2983>

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<https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/2926>