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Artículos Científicos

Competencias docentes: brecha entre teoría y percepciones en la Universidad Autónoma de Chihuahua

Teaching skills: Gap between theory and perceptions in the Autonomous University of Chihuahua

Competências de ensino: lacuna entre teoria e percepções na Universidade Autônoma de Chihuahua

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Resumen

La educación superior requiere de una transformación significativa en sus procesos de enseñanza-aprendizaje debido al cambio significativo del entorno actual. Este nuevo contexto exige adaptaciones sustanciales en todos los aspectos asociados, particularmente por parte de los docentes. Por ello, se realizó un análisis de brechas para contrastar diferencias entre la importancia y el nivel de desarrollo de competencias académicas en docentes de la Universidad Autónoma de Chihuahua (UACH). Para esto, se aplicó una encuesta en línea a 372 profesores para evaluar seis factores que agrupan los dominios de las competencias docentes establecidas por la UACH como un perfil deseable. Se realizó un análisis cuantitativo descriptivo de medias y conglomerados. A partir de las agrupaciones arrojadas por el análisis estadístico, se demostró que las evaluaciones respecto a la importancia y desarrollo de las competencias docentes se polarizan al considerar la antigüedad de los docentes: los de mayor antigüedad evalúan consistentemente de manera más baja tanto la importancia como el desempeño logrado, en comparación con quienes tienen menos de 15 años como profesores. Asimismo, es evidente que se requiere replantear la participación docente en torno a varias de las competencias, como procesos de investigación, tutorías y valoración del desarrollo de competencias. Por lo tanto, se concluye que es necesario considerar la manera en que la antigüedad afecta la evaluación de las percepciones hechas según su importancia y nivel de desempeño.

Palabras claves: competencias docentes universitarias, educación superior, México, universidad pública.

Abstract

Higher education must undergo a significant transformation in teaching-learning processes due to a radical change in the environment in which they work. This new context requires substantial changes in all associated aspects, particularly by professors. That is why a gap analysis was undertaken, in order to contrast differences between importance and level of development of academic competencies in professors of the Autonomous University of Chihuahua (UACH). An online survey was applied to 372 collaborators where six factors that grouped the domains of teaching competencies, established by the UACH, were evaluated as a desirable profile. A quantitative-descriptive analysis of means and



conglomerates was performed, which showed that, according to the groupings thrown by the statistical analysis, the evaluations regarding the importance and development of the teaching competences are polarized when considering the antiquity of the teachers. Those with the greatest seniority consistently assess the importance and performance achieved in a lower way, compared to those with under 15 years of experience as teachers. Likewise, it's evident that it is necessary to rethink professors' participation regarding several of the competences, such as research processes, students tutoring, and evaluation of the development of competences. It is necessary as well to consider how Seniority affects the evaluation of the perceptions made, regarding their importance and level of performance, considering that with a simple perception survey it is not possible to adopt measures that optimize the curricular model implemented by the institution.

Keywords: teaching skills, higher education, Mexico, public university.

Resumo

O ensino superior requer uma transformação significativa em seus processos de ensinoaprendizagem devido à mudança significativa no ambiente atual. Esse novo contexto requer adaptações substanciais em todos os aspectos associados, principalmente pelos professores. Por esse motivo, foi realizada uma análise de lacunas para contrastar as diferenças entre a importância e o nível de desenvolvimento de competências acadêmicas em professores da Universidade Autônoma de Chihuahua (UACH). Para isso, uma pesquisa on-line foi aplicada a 372 professores para avaliar seis fatores que agrupam os domínios de competências de ensino estabelecidos pela UACH como um perfil desejável. Foi realizada uma análise quantitativa descritiva de médias e agrupamentos. A partir dos agrupamentos fornecidos pela análise estatística, demonstrou-se que as avaliações quanto à importância e desenvolvimento das competências de ensino são polarizadas quando se considera a antiguidade dos professores: aqueles com maior antiguidade avaliam consistentemente tanto a importância quanto o desempenho alcançado, comparado com aqueles com menos de 15 anos como professores. Da mesma forma, é evidente que é necessário repensar a participação docente em torno de várias competências, como processos de pesquisa, tutoriais e avaliação do desenvolvimento de competências. Conclui-se, portanto, que é necessário considerar a





maneira pela qual a antiguidade afeta a avaliação das percepções realizadas de acordo com sua importância e nível de desempenho.

Palavras-chave: competências de ensino universitário, ensino superior, México, universidade pública.

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Introduction

Universities and society in general are immersed in a constant evolution generated mainly by the dizzying technological change, which has caused teachers to constantly update themselves in many aspects in order to respond to the demands of the current environment. In this context, learning cannot be limited to specific times and places, since it is necessary to have alternatives to incorporate the new theoretical and practical knowledge that is adapted to the new knowledge society (Castells, 1999; Díaz, 1993; Duart and Martínez, 2001; Duart and Sangrá, 2000).

Starting from this globalized and technological world that has filtered into all aspects of human coexistence, the need for a reform of the university curriculum is pointed out. This should incorporate the technological skills required for both students and teachers, as well as the large amount of data and information available online (Cano, 2008). In this way, knowledge and attitudes —elements of competences— can be generated to solve the various problems that afflict and impede the development of societies.

Different authors are convinced that the new educational paradigm that is emerging today is based on collaborative and online learning, which is why the individual must join the knowledge society, the origin of social and economic development (Barrón, 2009; Harasim, Hiltz, Turoff and Teles, 2000).

The role played by higher education, therefore, should focus on guiding, improving and strengthening the competencies required to function in this environment, which must be included in the training of students. Only in this way will it be possible to meet the demands of a globalized and increasingly competitive context to which teachers must adapt in order to better guide students in the learning process. (Barrón, 2009; Cano, 2008;





Harasim et al. 2000; Llanga, Guacho, Cuadrado y Guacho, 2018; Morín, 1999; Tobón, 2012; Unesco, 2012).

The foregoing constitutes a reality to which the Autonomous University of Chihuahua (UACH) is no stranger, so it was decided to convene a group of university professors in order to develop a profile of teaching competencies and design a frame of reference that established six factors that group various desirable skills in a higher education teacher. In this process, the importance (desired domain) that the participants gave to each competition of the academic profile of the university teacher, as well as the level of development or domain of these (existing domain) was taken into account.

From a diagnostic self-evaluation, an attempt was made to detect gaps that can be used to propose strategies to stimulate in teachers competencies that meet current challenges.

Theoretical framework

It has been defined that the UACH educational model is based on three basic axes: 1) competency-based education, 2) curricular flexibility and 3) educational processes focused on learning. These, together, point towards the development of educational practices oriented towards interdisciplinarity, group work, knowledge applied to concrete realities and the role of the teacher as coordinator and facilitator of learning, coupled with the active participation of the student.

The concept of competence is not limited to a solely cognitive level, since the vision of procedural and attitudinal aspects has also been included. The term competencies refers to knowing-doing and recognizing the consequences of such actions, hence it includes knowledge, techniques, values and responsibility for the results obtained (Marín, 2003; Marín, Guzmán, Márquez and Peña, 2013).

When trying to define the profile of teachers, there is a certain tendency to consider the orientation linked to teaching, as well as a lack of priorities regarding the qualities and necessary knowledge. Therefore, it is suggested to establish an intermediate point, where there is clarity and precision in the established profile, as well as a clear hierarchy of priorities in relation to what is intended to be achieved.



For this reason, below are some contributions from various authors, who describe the ideal skills that university teachers should develop. For example, and according to Race (1998), there are four conditions that combine and have an impact on higher education: 1) explosion of knowledge and its respective obsolescence; 2) revolution in information and communication technologies, ubiquitous in higher education; 3) speed with which knowledge is effectively learned, and 4) student empowerment, as a consequence of the change from teaching to learning.

For Rodríguez (2003), on the other hand, the university of the 21st century will be unrecognizable, since it will be submerged in an environment dominated by technologies, which will force the university professor to develop a new identity that combines the new roles and functions in accordance with emerging defined scenarios.

Other authors visualize the university according to three main functions: teaching, research and service (Salinas, 1999). Others, such as Barnett (2002), mention the complexity it faces as an institution, being continually questioned and challenged. For this reason, different experts affirm that new higher education models must be generated (Morín, 1994, 1999; Tobón, 2006, 2012), where not only the study plans are updated, but also the teaching-learning methodologies.

In the midst of all these evolutionary suggestions, the ideal profile of the teacher seems to be one capable of developing competences to recognize and evaluate the different forms of learning. In addition to this, a research professor is required to keep up-to-date with the information generated in his field and to be able to be sensitized regarding the labor issues of his students. In short, it is essential to have a professional who can handle the different teaching-learning processes in the different modalities (face-to-face and virtual), take into account the aspirations of their students, recognize the impact of globalization to incorporate it into the curriculum, as well as the diversity of origins of the students and their needs for inclusion and support to develop appropriate activities according to the situations raised in class (Fielden, 2001; Zabala and Arnau, 2008).

To the previous recommendations, other authors add that real solutions are not usually created that promote the design and planning of the training project or the organization of physical resources (conditions of the work environment), for which the inclusion of resources should be promoted. technology, tutoring and individualized



student advice, collaborative work with other teachers, as well as evaluation and review systems for the entire teaching-learning process. Likewise, the study of how knowledge is generated and disseminated in each disciplinary field must be considered, which requires a deep reflection on the teaching practice itself. All this without neglecting personal communication and ethics to fully assume the wide range of professional, labor and social commitments that will allow teachers to act fairly in their evaluations (Rodríguez, 2003; Zabalza, 2003). This means that the university professional must be able to exercise his freedom of thought with responsibility so that from his own experience he promotes the permanent development of knowledge and skills (Perrenoud, 2007, 2011).

Taking these variables into account, in this work a gap analysis has been carried out to compare the real state of the competences of UACH teachers with respect to the importance attached to them and their respective level of development. In this way, an attempt is made to generate a reflection that allows the desired teaching profile to be continuously strengthened through a program that adjusts to their training needs, established according to the requirements of current university higher education.

Method

The research included the participation of 372 university professors, selected from a population of 3,390 professors. The size of the sample with which we worked assumes an error of $\pm 5\%$ estimated, for a confidence level of 95% and under the most unfavorable situation in which p = q = 0.50. The sampling process carried out was stratified random. Data collection was carried out between 2016 and 2017.

The statistical package Statistical Package for Social Science (SPSS), version 20 was used for the statistical analysis. The measurement instrument used was an opinion survey, which was designed collegially among experts and applied online. The instrument integrated 11 variables corresponding to general data (gender, age, educational level, employment status, length of teaching, among others), as well as 60 variables associated with the competency domains, which were grouped into six factors or dimensions. Each of the questions on the questionnaire referring to competencies was answered according to a four-point Likert scale, where 1 represented the lowest level of mastery and 4 the highest level. The reliability of the





instrument was estimated using Cronbach's alpha, which was greater than 0.80 (this demonstrates an acceptable reliability).

Through the applied instrument, teachers were asked to evaluate according to their own perceptions 1) the level of importance they attached to each of the domains associated with the six competencies, and 2) the level of development that they considered they had in relation to those domains. The six factors defined by the UACH that grouped the various academic competences were:

Manages the progression of learning / coordinates the pedagogical interaction including (GAP.AI)

Domains: a) provides feedback to students in solving problems in real learning situations; b) considers the critical incidents that arise in the classroom to solve learning and training situations; c) assesses the training paths, performances and levels of achievement of students to make adjustments to their teaching design; d) adapts learning strategies to meet the characteristics of the students; e) make curricular adjustments to contribute to the progression of learning; f) practice inclusive teaching focused on learning; g) generates group and inclusive learning environments; h) adapts expected learning and evidence of performance, considering diversity and educational needs; i) apply active and participatory intervention strategies to allow horizontal and assertive communication; j) attends to the diversity of the student, mobilizing innovative and motivating strategies for their development; k) builds cognitive scaffolds for the development of competencies based on the learning needs of students; l) generates interaction between academic peers in diverse learning environments and situations.

Provides tutoring for your students (TUT)

Domains: a) shows an empathetic attitude that helps the student to understand and resolve the possible risks that this could have in their academic development; b) generates in students the interest to learn and undertake through self-directed, autonomous and self-regulated learning processes; c) identifies the needs and conflicts that students face, derived from educational interactions, attending to diversity; d) guides and / or channels the student





in a pertinent way to problems that warrant another level of attention; e) analyzes the academic trajectory of the tutor, considering the organization of the curriculum, as well as the university regulations; f) monitors academic, emotional, social and health problems posed by the tutor; g) provides feedback to the tutors about their performance; h) guides the tutors on their participation in research activities, academic exchange, student mobility and / or extracurricular activities; i) develops support / accompaniment strategies according to the needs of the tutors, their competences and performance; j) jointly analyze during the tutorials the student's training goals.

Develops research processes / implements organizational academic management (PI.IGAO)

Domains: a) conducts research that provides solutions to scientific, artistic or humanistic problems; b) apply research methods that provide solutions to the complex problems that society and the university pose; c) produces and publishes texts (articles, chapters, books, etc.) and educational material; d) advises research projects of university students; e) participate in the development of research groups and / or communities of practice for the discussion and analysis of research results; f) organize and participate in national and international research events to disseminate and promote knowledge in their area; g) participates collaboratively in the evolution of the academic body to which it belongs; h) Participate in evaluation processes of actions aimed at institutional strengthening and improvement; i) manages the educational and technological resources that support the student learning process; j) organizes events (academic, research, cultural, sports, etc.) to strengthen learning environments; k) participates in academic commissions (editorials, judges, evaluators, accreditable bodies); l) manages financial, human and / or physical resources to support the development of its projects; m) contributes to the formation of networks of national or international academic bodies.





Integrate digital resources and technologies into your educational practice (ITD)

Domains: a) integrates tools and digital media for the generation of knowledge in its educational practice; b) carries out information search and management processes to facilitate inclusive learning; c) uses digital resources and technologies for learning and knowledge (TAC) in managing content appropriate to the needs of students; d) makes critical use of the means to guide students in the construction of knowledge; e) uses digital resources and TAC in the design of learning environments considering diversity; f) integrates digital resources into their educational practice to generate and publish knowledge in information networks; g) promotes communication and knowledge management processes in a foreign language through the use of digital tools.

Manages his own training / carries out didactic transposition processes / designs innovative teaching (PGF.TD.DI)

Domains: a) drives their personal and professional development from the analysis and critical reflection of their educational practice; b) manages their training establishing their professional development trajectory; c) integrates its continuous training process from a collegial perspective; d) establishes links that allow generating updating strategies, considering the diversity of educational and social scenarios for the development of their educational practice; e) links the institutional and curricular project with the purposes of its learning unit from an inclusive perspective; f) reflects his educational practice and his epistemological position on the transposition of knowledge; g) carries out the didactic transposition of knowledge, attending to diversity; h) analyzes the infrastructure and the academic-administrative organization of the curriculum, in order to facilitate access conditions and the transposition of the knowledge that it integrates into its educational practice; i) links the institutional and curricular project with the purposes of its learning unit from an inclusive perspective; j) works collaboratively the institutional and curricular project articulating it to the current socio-educational context; k) designs its teaching in an innovative way based on real situations, pertinent to the purposes and training contexts, considering transversal and transdisciplinary axes; 1) designs training and evaluation devices





for the development of competences based on the expected learning; m) designs training and evaluation devices for the development of competences based on the expected learning; n) innovate their teaching considering the institutional educational and pedagogical model.

Values the development of skills (DC)

Domains: a) apply appropriate instruments that allow evaluating the level of achievement of student learning; b) uses the evaluation results for continuous improvement; c) values evidence of knowledge, attitudes, work and performance, as inputs for the achievement of competences and personal and professional development; d) analyzes in a personal and group way the achievements of the learning units with respect to the curricular proposals implemented; e) implements self-assessment and self-regulation strategies in achieving the expected learning in a personal and group way, considering diversity.

For the description of results, a quantitative analysis of data means was defined, grouped for each of the elements or domains, which made up each of the defined competences. Subsequently, the differences - or gaps - were established between the established values, the perceived importance and the level of development of the competences. Additionally, a statistical analysis of clusters was developed that allowed obtaining a better perspective of the evaluation made, which included the variable age, whose average was 25 years.

Results

The previous analysis processes led to the preparation of the respective tables and figures, which are presented below:





TUT	Brinda tutorías a estudiantes		
GAP.AI	Gestión de aprendizaje progresivo y		
	aprendizaje inclusivo		
PI.IGAO	Procedimientos de investigación e		
	implementación de gestión académica y		
	organizacional		
ITD	Integra tecnologías digitales		
PGF.TD.DI	Gestiona formación propia-trasposición		
	didáctica-docencia innovadora		
DC	Valora el desarrollo de competencias		

Tabla 1. Descripción de abreviaturas usadas para competencias

Fuente: Elaboración propia

A cluster analysis was carried out that allowed classifying the perceptions expressed according to the groups of high, medium and low, according to the evaluations on the proposed scale from 1 to 4. Likewise, the variable seniority in teaching was categorized into low levels (less than 15 years), medium (between 15-30 years) and high (over 30 years). From these groupings, assigned according to the statistical analysis of k-means, the following contrasts were obtained between the importance assigned to each competence and the performance achieved in it. The group allocation obtained was as follows:

 Tabla 2. Contraste entre importancia y desempeño para conglomerados bajo-medio-alto

 incluyendo antigüedad

	IMPORTANCIA	DESEMPEÑO	IMPORTANCIA	DESEMPEÑO	IMPORTANCIA	DESEMPEÑO
Factores	Bajo		Medio		Alto	
Antigüedad	Media 15-30	Media 15-30	Media 15-30	Baja <15	Baja <15	<mark>Baja <15</mark>
(años)				-	-	_
TUT	<mark>1.76</mark>	<mark>1.74</mark>	2.82	2.82	<mark>3.86</mark>	3.74
GAP.AI	1.79	2.57	3.37	3.35	<mark>3.85</mark>	<mark>3.75</mark>
PI.IGAO	1.79	<mark>1.68</mark>	2.49	2.33	3.77	3.45
ITD	1.75	2.34	3.29	3.19	3.82	3.68
PGF.TD.DI	2.01	2.51	3.30	3.22	3.80	3.67
DC	<mark>1.62</mark>	2.35	3.24	3.24	<mark>3.85</mark>	<mark>3.77</mark>
Medias	1.79	2.19	3.08	3.02	3.83	3.68

Fuente: Elaboración propia

This table highlights those values considered as extreme, that is, both the lowest and the highest. It is also worth highlighting how age groups are polarized: while teachers with average seniority (between 15-30 years) evaluate towards low values on the scale, teachers with low seniority (less than 15 years) tend to assign high values for all competencies.





From the previous table, the following graphs are obtained that allow for greater clarity on how the competencies in each cluster were evaluated and contrasted, which are presented in ascending order (low, medium and high, respectively):

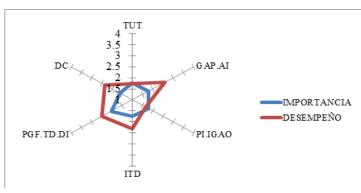
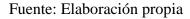


Figura 1. Valores obtenidos para el conglomerado bajo



It can be seen how the importance assigned to each of the competences in this group is consistently rated low, generally below the half of the established scale, with average values between 1.79 and 2.19. It is notable how performance levels are assessed above respective importance. The only exception is the Academic and Organizational Management Research-Implementation Procedures (PI.GAO) competition, where a slightly greater importance is recognized, although with a performance established below it, with a difference of .09

It is evident the little relevance assigned particularly to the competences. Values the development of competences, but that shows a greater gap (0.73) in relation to its corresponding level of development. Similarly, providing tutoring to students is evaluated with low importance, hand in hand with the recognition of an equally low performance in this area. The competencies considered most important are Manage own training-didactic transposition-innovative teaching (GF.TD.DI) and the aforementioned PI.GAO.

Regarding the conglomerate obtained for average evaluation, the following data are presented:





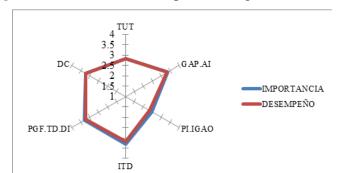
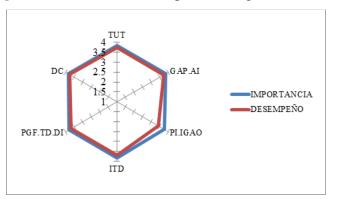
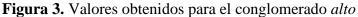


Figura 2. Valores obtenidos para el conglomerado medio



It is interesting to observe how for all the competences there is practically no gap between the perceptions of importance and level of performance, since these evaluations reach average values (between 3.08 and 3.02), which places them above the half of the scale proposed for your measurement. Within this conglomerate, the Academic and Organizational Management Research and Implementation Procedures (PI.IGAO) and Mentoring to Students (TUT) competencies obtain the lowest scores regarding the importance given and also for the level of performance established. Likewise, it is observed that the only competence that presents a slightly more differentiated gap between its importance and performance is Academic and organizational management research and implementation procedures, evaluated with a little more importance compared to the recognized performance. This last characteristic is consistent with respect to the low evaluation cluster described above. Finally, the graph corresponding to the high conglomerate is presented.





Fuente: Elaboración propia





In a similar way to the average conglomerate, a closeness between the perceptions of importance and performance is appreciated, being again the competence associated with the Research Processes-implements academic-organizational management (PI.GAO) which shows a slight difference between both perceptions, although again its importance is considered greater than the performance achieved. The mean values of this group range between 3.83 and 3.68, which places them very close to the maximum value of the applied scale. PI.GAO is the competence to which the lowest evaluations are assigned regarding its importance and level of performance achieved.

Gaps

Finally, the differences between the extreme values of the low and high clusters were calculated to determine where the greatest gaps by competencies were, established based on the importance and level of perceived performance. Table 3 shows these results; The three values that have the greatest differences for each dimension (importance and performance) are highlighted:

	Importancia	Desempeño	Brecha	
TUT	2.10	2.00	0.10	
GAP.AI	2.06	1.17	0.89	
PI.IGAO	1.98	1.79	0.19	
ITD	2.07	1.36	0.71	
PGF.TD.DI	1.79	1.17	0.62	
DC	2.23	1.42	0.81	
Fuente: Elaboración propia				

Tabla 3. Brechas establecidas por competencias

In this summary, the gaps between the importance attached and the level of performance achieved can be seen. The first place is occupied by Management of progressive learning and inclusive learning (GAP.AI), with a difference of .89, followed by Values the development of competences (DC) with 0.81, and thirdly Integra digital technologies (ITD) with 0.71



Discussion

The results obtained from the gaps previously identified allow us to recognize the different perspectives, as well as the main deficiencies presented by UACH teachers. First, the Progressive Learning and Inclusive Learning (GAP.AI) competence — established as one of the most relevant aspects by several of the authors (Fielden, 2001; Perrenoud, 2007; Zabala and Arnau, 2008) - has the biggest difference. This translates as a lack of self-reflection towards the teaching practice itself, hand in hand with the generation of new collaborative and inclusion strategies.

The second place is occupied by the competence. Values the development of competences (DC), which is worrying, since this could be considered as one of the cornerstones of the new educational models and processes (Morín, 1994; 1999; Tobón, 2006; 2012). Teachers must reorient their evaluations towards evidence of knowledge, attitudes, work and performance as inputs for the achievement of competencies and personal and professional development, legitimate aspirations of students today. Without this fundamental change in the way of evaluating, the desired transformations in students will not be valued by teachers.

Finally, the Integra Digital Technologies (ITD) competence is mentioned by practically all the cited authors (Barrón, 2009; Castells, 1999; Race, 1998) as the main cause and trend in the educational field. This merger ranges from the need to create new educational models to their respective teaching-learning processes, generated from the explosion and speed in the generation of knowledge. All this transformation is based on the incorporation and management of technological tools that allow both teachers and students to keep up with the progress made by this knowledge society.

From the diagnosis made, the need arises to generate complementary studies, such as interviews and focus groups, hand in hand with the analysis of the plans and programs of the different careers that the institution imparts, which allow generating enough elements for a decision-making process. right decisions. A limitation of a study such as the one presented is precisely the need to search for more information, to corroborate the findings to adopt the curricular, methodological or evaluative measures necessary for the implementation of this new teaching profile.



Conclusions

Based on the results and previous discussions, it can be affirmed that recapitulations on tutoring competencies and investigation procedures stand out, which come to light in practically all the analyzes carried out. On the one hand, for the tutorials, the little interest that is perceived in developing said competence is observed, which can be attributed to the same perception that it is already sufficiently mastered, as it is evaluated in all conglomerates very closely always among its performance and importance. On the other hand, for the research its importance is recognized, as well as a level of performance below what is consistently required in the different groups obtained.

Secondly, regarding the gaps established in Table 3, the one with the greatest depth is found in Progressive Learning Management and Inclusive Learning, followed by Assessment of the development of competences, both associated with fundamentally pedagogical aspects in the desirable profile of the university teacher. It is notable that it is precisely the competence linked to the assessment in the development of these that shows one of the greatest gaps, which shows the need to reinforce the training of teachers in these aspects. Thirdly, the Integration of digital technologies appears, a competence that — according to the new globalized educational contexts— is a cornerstone and transversal to achieve an integral development of the university professor.

Finally, by including the age factor in teaching in the analysis, the polarization and grouping of the evaluations stands out. It is evident how seniority is related to the values assigned to the responses. The older it is, the better the distinction between the evaluated competences, as well as the lower valuation in all the answers regarding the perceived importance and development. While for academics with less seniority there is no clear differentiation between competencies, and their respective evaluation presents higher values, both in importance and in development.

Likewise, it is paradoxical that, on the one hand, teachers perceive that they can influence and propose solutions to problems in their environment by favorably evaluating the design of their teaching as innovative from the approach of real and relevant situations, when, on the other hand, They acknowledge that they have not developed the research competence, which would be the basis to substantiate these achievements. Something similar happens with the assessment of the development of competences: its importance is recognized, but its level



of achievement is still low. In addition to the above, there is a gap in the integration of digital technologies, which should contribute to enriching and reflecting on the teaching-learning processes of educational practice.

Based on the results already presented, there are elements worthy of being considered relevant within the differences expressed between the perceptions of importance and performance (particularly, the way in which seniority affects said perspectives). It is established that with greater seniority in teaching it is possible to distinguish differences between the domains that make up the different competences evaluated, which allows obtaining a more accurate diagnosis. While for those who have relatively little time working as teachers, it is perhaps more difficult to discern between the different aspects that must be developed, as well as a greater critical perception regarding the level of development achieved in the described competences.

It is evident the need to rethink the participation and work of the teacher in the various competencies established as desirable, which must be accompanied by strategies that favor collegial and collaborative work, as well as the promotion of research and problem solving, both within as outside the institution itself. The effective implementation of a curriculum with these characteristics is a multidimensional question, since various aspects must be considered, ranging from the conditions provided by the same institution to the preparation and will expressed by the academics involved.

More broadly, this diagnosis made it possible to identify the current situation of the professors at the Autonomous University of Chihuahua regarding their own perception in relation to the proposed competency profile. The expected result will be the generation of consistent strategies and actions to increase the level of mastery of these academic competences, considering the grouping of profiles found among the teachers who collaborate in the institution.



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