

# The process of knowledge management in the achievement of university student competences

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## Abstract

Knowledge management proved new improvements and follow-up, acquired an expressive importance as an alteration factor, stimulated innovation and above all provoked improvements in decision making by creating new knowledge. The objective was to determine the influence of the knowledge management process and the achievement of didactic competencies in students of the National University of Cañete-2021, the study was of quantitative approach, non-experimental design and descriptive-correlational level, the sample was of 90 students of the School of Tourism and Hotel Management where the questionnaire instrument was applied. It was obtained as a result that there is an influence on the knowledge management process

## Key words:

Knowledge management, didactic competencies, orientation, capacity, educational practices.



and the achievement of didactic competences of university students, with a statistically significant correlation of 0.920. It is concluded that the knowledge management process is determined in 84.6 % with the achievement of didactic competences in the students of the tourism and hotel management career of the National University of Cañete.

### **El proceso de gestión del conocimiento en logro de competencias estudiantes universitarios**

#### **Palabras clave**

Knowledge management, didactic competencies, orientation, capacity, educational practices.

#### **Resumen**

La gestión del conocimiento probó nuevas mejoras y seguimiento, adquirió una importancia expresiva como factor de alteración, estimulo la innovación y sobre todo provoco mejoras en la toma de decisiones creando nuevos conocimientos, tuvo como objetivo, determinar la influencia del proceso de la gestión del conocimiento y logro de las competencias didácticas en estudiantes de la Universidad Nacional de Cañete-2021, el estudio fue de enfoque cuantitativo, diseño no experimental y nivel descriptivo- correlacional, la muestra fue de 90 estudiantes de la escuela de administración Turismo y Hotelería en donde se aplicó el instrumento del cuestionario. Se obtuvo como resultado que existe influencia en el proceso de gestión del conocimiento y el logro de las competencias didácticas de los estudiantes universitarios, con una correlación estadísticamente significativa de 0.920. Se concluye que el proceso de gestión de conocimiento está determinado en un 84,6 % con el logro de las competencias didácticas en los estudiantes de la carrera turismo y hotelería de la Universidad Nacional de Cañete.

## 1. Introduction

Knowledge management is established as the progress through which a planned institution with skills-skills is allocated with efficiency information, it is one of the substantial functions of higher education institutions, it is the reason, mission, that different institutions have, through which they end up transcending their knowledge and contributing to the socio-productive and cultural development of society ( Montoya and Arenas, 2016 ; Botero, Arias and Lorenzo, 2018).

In their criteria García and Cárcamo (2017) as Oliva (2016) also refers that the model of curricular designs focused on knowledge management and competencies, has been fundamental allusive of the Ministry of Education, learning by competencies is established in the current agenda of the debate with the Chilean education, as it is becoming generalized in trends in educational matters, with a support of type or curricular model demonstrated in competencies.

The purpose is to distribute norms that ensure that the profound expansion of the Universities is carried out within some quality and importance frameworks required by the contemporary world. Thus, it is sought that young people have security and guarantees that the studies they have carried out comply with aptitude requirements and that they have the means to obtain, in the medium term, double degrees and coupling techniques with countries of the European Union and the United States.

On the one hand, according to Pérez and García (2018) determine that knowledge management has achieved an important interest as a component of progress and variability in all the work of society, in that context, it is key to make a culture where understanding and inquiry are valued, managed, distributed, and used efficiently, it is manifested that knowledge management influences the didactic competencies of an Educational Network in Lima.

For educational institutions the obligation is greater in this sense, they are provisions dedicated to knowledge, so they must indeed be transformed into effective knowledge management entities,

otherwise they would not be fulfilling the role that society has indicated to them. In this process, for Pérez and Coutin (2016) and Sierra (2016) educational institutions must employ all feasible resources, thus inquiry and communication technologies that have been transformed into necessary tools for learning. Likewise, knowledge management will serve as a support in higher education practices in the organization where they perform, estimating that knowledge management can be composed with the ability to change the school into a knowledge institution.

In this context Gómez (2018) points out that Peruvian Universities with difficulty have managed to apply knowledge management, this is a foundation of concern in society, consequently, it is there where further increase in knowledge is required so that they can thus graduate qualified professionals who contribute to the development of the country.

Likewise, Farfán and Garzón (2016) presented in their research that knowledge management is exposed to provide and favor a structure, efficient and innovative, even that the information and skills needed to create new who are properly who over time thrive in research with the contribution of ideas and who contribute to society, being a key tool to meet the challenges of the future.

For Camacho (2019) knowledge management from the institution is an obligation and planning as a need for attention, in that sense not having been instituted by itself as a fraction of education. In this same context, our reality is manifested with an educational system in different reforms, which drives teachers to defend themselves with affliction, indifference and indecision, but which at the same time accommodates to time, and adjusts to changes with determination.

In agreement, with Saenz (2018) mentions that knowledge management is an elevated space that has varied in the center of controversies in the business part. It takes efficiency coupled with knowledge, the same with its planning, creation, planning, communication and practice, with the purpose of motivating the value of institutions. It is undoubtedly guaranteed to the concept that leads to an outstanding advantage that will allow companies to preserve an increasingly competent market as a result of the phenomenon of globalization of economies. In short, it is a

convenient management of knowledge that will help organizations to successfully face the exposed challenge.

It is important to know the connected effectiveness of knowledge management, as well as the transmission, creation, planning and use in order to create value for organizations. Likewise, the link between knowledge management and university higher education is specified, it is necessary to emphasize that knowledge management is an integral function of any organization, and higher education institutions are no exception for training processes and research processes. Therefore, it is necessary to implement a strategic program where knowledge management has become the main character in the curricular designs.

Knowledge management has achieved significant importance as a divider of variation, change and development in a society or institution. Consequently, its mission is to determine an environment in which cognition, analysis and studies suitable in an organization are viable and can be used to encourage a finding, stimulate progress in decision making and realize new knowledge.

In synthesis, that a culture is established where study and knowledge are valued, distributed, managed and have become competent. Likewise, information and communication technologies have provided tools of obvious acceptance or importance for the generation of knowledge principles making them incorporate a new framework for research and progress (Rodriguez et al., 2019).

### **Models of knowledge management in education**

Giraldo (2018) explains the models of knowledge management explained below:

**Cognitive Model of Knowledge Management:** It refers to the processes of sharing, creating, capturing, locating knowledge and experiences that will be used in problem solving. And the outstanding model mentioned is the Knowledge Creation Model, proposed by Nonaka and Takeuchi, which highlights two types of knowledge, explicit and tacit, where the processes of: combination,

externalization, combination, internalization and socialization are included.

**Network Model of Knowledge Management:** it arises in comparison with the theories of the network organization and focuses on the acquisition, exchange and transfer of knowledge. From this perspective, the networks in which people are immersed are important, since this broadens the possibility of acquiring knowledge, which can later be shared within the organization.

**Community of Practice Approach Model of Knowledge Management:** based on the interaction that exists between the different levels of the organization, where the members of the community share resources, values and mutually seek to solve problems, a good management practice can offer great rewards, such as increasing the efficiency of the processes in education.

### **Dimensions of knowledge management in education**

**Creation of knowledge:** Human knowledge is a subject that can be approached from many possible angles and whose nature is difficult to grasp, although much easier to classify. Thus, the study of knowledge, on the one hand, reflects on its characteristics and its conditions of appearance. On the other hand, this discipline orders knowledge on the basis of its limitations, formal requirements or mechanisms that we use to validate them and differentiate knowledge from faith, fantasy or error (Raffino, 2020).

**Knowledge transfer and storage:** they identify three major models of knowledge transfer from universities: the linear model, the dynamic model, and the triple helix model. In the linear model, knowledge transfer is preceded by scientific discoveries; the dynamic model constitutes an improvement of the linear one and has as its purpose the transfer of knowledge through commercialization or diffusion, formal and informal, and the triple helix models that have evolved, from a conception in which the State plays the most preponderant role in directing the relationships between companies and universities, actors with delimited fields of action that interact with each other; until reaching the current notion (Marullanda, 2018).

**Application and use of knowledge:** knowledge management involves people working for the comfort of an institution or entity; through it,

companies can extend and create important information in an efficient and organized way in order to achieve better compliance in areas of planning or organization, especially to improve their competitive capabilities. When you want to determine the wealth of an organization, it is no longer enough to go to the financial information, because it is also important to observe its intellectual capital, as this makes it stand out above its competitors (Cusiquisque and Pultay, 2019).

### **Didactic Competence Models**

**Planning:** It is the teacher's ability to plan, organize and project the content of a program, as well as assessments, teaching, learning and evaluation. In this development, it is considered that the didactic novelties that teachers have, the knowledge related to their experience and discipline. Therefore, it is likely to determine the values, vision, objectives, mission and action plans that will be used to achieve them.

**Didactic treatment of contents:** The following is mentioned: the selection, sequencing and organization of contents in a didactic way. At present, it must be shown that they must be in accordance with the advances and current approaches of the discipline, in such a way that they cover all the presence according to the professional experience and importance that is linked to the contents.

**Communicative:** Corresponds to the ability to inform students. Undoubtedly, in this competence the teacher must have knowledge of ICT, which requires the design of didactic learning guides and maintain stable contact with students through different electronic media in order to focus on informing the student for the organization of tasks and the growth of skills.

**Methodological:** Addresses all the facts that direct the teacher's tasks, where they have to do with the scope of learning spaces in which students have real scenarios to work, guiding a selection of techniques or procedures about the realization of tasks linked to research, projects or work.

**Communicative and relational:** It is transversal since communications are developed in all disciplines. For this reason, the relationship between the teacher and the student plays an important

role here, since it depends on them that the student achieves the competencies that are sought to be elicited.

**Tutorial: It is** understood as a form of performance in education, where the teacher systematically guides the student through the establishment of projects, techniques and teaching objectives. In synthesis, here a pedagogical relationship is determined in which the teacher has the role of a guide with the purpose of detecting learning problems.

### **Dimensions of Didactic Competencies**

**Educational guidance:** It is dedicated to renew the quality of an educational institution. This quality is determined by the different competencies of the institution for the progress of new educational responses to all students, ensuring that each person can obtain their maximum potential for optimal learning, without their social, personal or other preconditions that prevent them from this progress of equality. The people who work are offered to the guidance working to obtain that purpose accompanying the students, teachers, families and manage numerous resources in this task of facilitation (Castillo,2019).

**Classroom practices:** Classroom practices are framed within several nexuses that coincide in the learning scenarios have been reflected from what is expected to result from an educational development, hence reference is made to effective classes, good classroom practices, or inspiring classes; in all cases highlighting the work of teachers in classroom dynamics (Rodriguez, 2017).

**Educational capability:** Educational capabilities are the means to act competently. These means are the skills, abilities, knowledge and attitudes that students use to cope with a defined position. These sufficiencies consider minor operations involved in competencies, which are more complex operations (Sanz, 2017).

The purpose of the research was to determine the influence of the knowledge management process and the achievement of didactic competences in students of the Tourism and Hotel Management career of the National University of Cañete-2021. It is based on the need to contribute with new methodologies applying didactic competences, during the development, the active participation of the



student will be promoted so that he/she plays a decisive role in the teaching-learning processes. Knowledge management will have a direct function in contributing and solving learning problems in the educational system institutions; consequently, the study will allow evaluating the influence of the knowledge management process and the achievement of didactic competences.

## 2. Methodology

The research responds to the hypothetical deductive method, in this procedure the hypotheses are fundamental ideas for new results. With a quantitative approach; its research process employs the observation of development in the form of data collection and examines them in order to answer its research questions. The study responds to Applied type research. The research design is non-experimental, the survey technique was used where the information was collected using the questionnaire as an instrument.

## 4. Results and discussion

The study deals with the influence of knowledge management processes and the achievement of didactic competencies of the students of the National University of Cañete-2021. In the descriptive analysis of the perception of the knowledge management process shown in Table 1.

**Table 1.**

*Perception of knowledge management processes.*

Categories	Frequency	Percentage	Valid percentage	Cumulative percentage
<b>Very bad</b>	9	10 %	10 %	10 %
Deficient	16	17,7 %	18 %	28 %
Regular	26	28.8 %	29 %	57 %
Good	20	22,2 %	22 %	76 %
Excellent	19	21,1 %	21 %	100 %
<b>Total</b>	<b>90</b>	<b>100.0%</b>	<b>100 %</b>	

The descriptive analysis showed, according to the data obtained, that 11% opted for the category very bad with didactic competencies. On the other hand, a group of 33% of the respondents were poor, while 20% were good with the didactic competencies. Finally, 19% were excellent in terms of didactic competencies, as shown in Table 2.

**Table 2.**

*Perception about didactic competencies.*

Categories	Frequency	Percentage	Valid percentage	Cumulative percentage
<b>Very bad</b>	10	11,1 %	11 %	11 %
Deficient	15	16,6 %	17 %	28 %
Regular	30	33,3 %	33 %	61 %
Good	18	20 %	20 %	81 %
Excellent	17	18,8 %	19 %	100 %
<b>Total</b>	<b>90</b>	<b>100.0%</b>	<b>100 %</b>	

Source: Didactic competences" sheet

When testing the hypotheses it was found that the significance level is equal to 0.00 and therefore less than 0.05; the null hypothesis is rejected. Therefore, from the result obtained it can be deduced that there is a statistically significant correlation of 0.920. This value determines the existence of a positive correlation between the influence of the knowledge management process that is significantly related to the achievement of didactic competencies, with a confidence level of 95% and 5% probability of error.

**Table 3**

*Correlation between knowledge management processes and the achievement of didactic competencies.*

Variables	Correlation	Influence of the process of management of knowledge	the achievement of didactic competencies
Influence of the process of management of knowledge	Pearson correlation Sig. (bilateral) N	0,920 (**) 0,000 90	0,920 (**) 0,000 90
the achievement of didactic competencies	Pearson correlation Sig. (bilateral) N	1 0,920 (**) 0,000 90	0,920 (**) 0,000 90

**5.** The correlation is significant at the 0.05 level (bilateral).

From the results it can be determined that the influence of the processes of knowledge management and the achievement of the didactic competences of the students of the national university of cañete-2021. The achievement of didactic competencies in students is determined in 84.6% by the knowledge management processes of the tourism and hotel management career of the national university of Cañete. These results are similar to those of Escorcía and Barros (2020) in which they conclude that knowledge management is a pending task, but the model presented may be the beginning to achieve significant results. The results of Huertas (2018) indicate that there was a relationship between the knowledge management model and competency-based training in educational institutions.

From the result obtained, it can be deduced that there is a statistically significant correlation of 0.852. This value determines that there is a positive correlation between the processes of knowledge management and classroom practice in the students of the Universidad Nacional de Cañete-2021. That is, the knowledge

management process is determined in 72.5 % by classroom practice in university students. Ordoñez (2018) indicates that if there are good results of teachers' commitment, obtaining a Spearman's rho correlation of 0.552, noting that the commitment of the staff working within the educational institution.

From the result obtained, it can be deduced that there is a statistically significant correlation of 0.895. This value determines that there is a positive correlation between knowledge management processes and classroom practices in the students of the National University of Cañete-2021. It is understood that didactic competences are determined in 80.1 % by knowledge management processes and classroom practices in university students. The results obtained agree with the findings that can be observed in the research of Ríos (2016) is based on the relationship between knowledge management and university higher education in the development of a society with an empirical research, because it is a fact that occurs in our society, and applied, because it will face the problem by proposing research solution alternatives and is justified in its practical aspect, since in the current environment of high competitiveness, globalization, technological development, reduction of product life and global crisis, knowledge management is key to achieve the sustainable success of the company.

## 6. Conclusion

The study showed that there is an influence of the knowledge management process and the achievement of didactic competencies in the students of the tourism and hotel management career of the National University of , being identified with a statistically significant correlation of 0.920. Assuming that it is assumed that the achievement of didactic competencies is determined in 84.6 % by the knowledge management processes, being a method that involves all the students and in their respective dimensions.

Likewise, it was concluded that if there is an influence of the knowledge management process and the educational orientation in the students of the tourism and hotel management career of the

National University of Cañete-2021, being an aid for the continuous improvement in their academic performance with the purpose of overcoming the requirements for obtaining the professional degree, it is assumed that the knowledge management processes are determined in 72.5 % by the educational orientation, a statistically significant correlation of 0.852.

It can be indicated that there is an influence of the knowledge management process and the classroom practice in the students of the tourism and hotel management career of the National University of Cañete, demonstrating the good practices and professional competencies of teachers based on the students' learning needs. Therefore, indicating that there is a statistically significant correlation of 0.895, and it is assumed that knowledge management processes are determined in 80.1 % by classroom practice in the students of the tourism and hotel management career.

There is an influence of the knowledge management process and the educational capacity in the students of the tourism and hotel management career of the National University of Cañete -2021, being if necessary to adequately perform a task or intellectual process proper to the professional performance. That is to say, the statistically significant correlation of 0.895, it is assumed that the knowledge management processes are determined in 78.5 % by the educational capacity in the students of the administration career Tourism and Hotel Management of the National University of Cañete.

## References

- Alania, R. and Turpo, O. (2018). Development of advanced social skills in journalism students at a Peruvian university. *Espacios*, 39(52).  
<http://www.revistaespacios.com/a18v39n52/a18v39n52p25>
- Borda, E, Medina, B. and Turpo, O. (2019). Violence in social relationships and resilience in an educational community. *Revista Universidad y Sociedad*, 11(2), 78-89,  
<https://rus.ucf.edu.cu/index.php/rus/article/view/1154>

- Camacho, C. (2019). Peruvian education: path to a knowledge management culture. Available at: <https://www.esan.edu.pe/conexion/actualidad/2019/03/06/educacion-peruana-camino-a-una-cultura-de-gestion-del-conocimiento>
- Candela, R. (2018). Competency Theory. Available at: <https://www.monografias.com/trabajos-pdf/teoria-competencias/teoria-competencias2.shtml>
- Castilla, C. (2019) What do we do in educational guidance? Available at: <https://colectivorienta.wordpress.com/2019/01/21/a-que-nos-dedicamos-en-orientacion-educativa/>
- Correa-Díaz, A., Benjumea-Arias, M. and Valencia-Arias, A. (2019). Knowledge management: An alternative for educational problem solving. *Educare Electronic Journal*, 23(2). <https://dx.doi.org/10.15359/ree.23-2.1>
- Dzul, M. (2017). Basic application of scientific methods. Retrieved from: [https://www.uaeh.edu.mx/docencia/VIw\\_investigacion/PRES38.pdf](https://www.uaeh.edu.mx/docencia/VIw_investigacion/PRES38.pdf)
- Farfán D. and Garzón M. (2016). Knowledge management. Retrieved from: <https://repository.urosario.edu.co/bitstream/handle/10336/1207/BI%2029.pdf;jsessionid=4D894BCFED17B5A12DDD5AA8D59F3A21E?sequence=1>.
- García, M. (2017). Towards an approach to education in Competencies. Available at: <https://redined.mecd.gob.es/xmlui/bitstream/handle/11162/2576/01720082000075.pdf?sequence=1>.
- García, G. and Cárcamo, A. (2017). Propuesta de un modelo para el diseño Curricular Basado en Competencias. Retrieved from: <http://www.upch.edu.pe/rector/dugec/images/files/biblioteca/39.PDF>
- Gonzales, M. and Turpo, O. (2020). Influence of cinema in the identity construction of in-service teachers. *Revista de Ciencias Sociales*, 26(2), 259-272. <https://doi.org/10.31876/racs.v26i2.32439>
- Guerrero J. (2019). Competencies and how to favor their development with a didactic sequence. Retrieved from: <https://docentesaldia.com/2019/04/01/que-son-las->

- competencias-y-como-favorecer-su-desarrollo-con-una-secuencia didactics
- Limaymanta, C. and Turpo, O. (2021). Factors associated to the job satisfaction of university teaching staff. *Actualidades Investigativas en Educación*, 21(1), 116-140. <http://dx.doi.org/10.15517/aie.v21i1.42494>
- Manterola, C. (2017). Sampling techniques on a Population under study. Retrieved from: <https://scielo.conicyt.cl/pdf/ijmorphol/v35n1/art37.pdf>
- Martinez, C. (2018). Knowledge Acquisition Process. Retrieved from: <https://www.lifeder.com/proceso-adquisicion-conocimiento/>
- Marulanda, E. (2018). Knowledge transfer model for research centers and institutes. Vol. 39 (No. 17) Year 2018. P. 35. <https://www.revistaespacios.com/a18v39n17/a18v39n17p35.pdf>
- Montoya, R. and Arenas, T. (2016). Interpreting Davenport and Prusak's notion of Knowledge in Action from J.L. Le Moigne's General System Theory. <http://informatio.eubca.edu.uy/ojs/index.php/Infor/article/view/182>
- Pérez, G., Yangali, J. and Turpo, O. (2021). Peruvian educational journals and their contribution to the analysis of teacher issues. *Aula*, 27, 191-205. <https://doi.org/10.14201/aula202127191205>
- Raffino, M. (2020). Theory of knowledge. Retrieved from: <https://concepto.de/teoria-del-conocimiento/>
- Ríos, T. (2017). The Social Dimension of the 21st Century University Creating the Apprenticeship Program. (Graduate thesis). University of Ambato, Madrid, Spain.
- Rodriguez, et al., (2017). Scientific methods of inquiry and knowledge construction. Available at: <https://www.redalyc.org/pdf/206/20652069006.pdf>
- Rodríguez, M. (2018). Didactic Proposal to Develop Research Competencies in Students of Professional Technical Careers at the Center for Research, Teaching and Administrative Consulting- CIDCA. (Graduate thesis). Universidad Militar Nueva Granada, Bogotá, Colombia.
- Turpo, O. (2013). The fractality of virtual education: nature and structure. *Education*, 22(42), 29-50.

<https://revistas.pucp.edu.pe/index.php/educacion/article/view/5290>