
Knowledge Management At The Higher Level: Systematic Review

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Abstract: From this systematic review, the objective was to study the incidence of knowledge management at the higher level; The perspective of the aforementioned authors led to the suggestion that knowledge management in higher-level institutions does not comply with a special model that is used effectively, although the use of knowledge is achieved through using technologies, innovation, leadership, etc. While it is true, knowledge must be created and shared in order to achieve competitive ability focused on success and as a consequence the improvement of society, the results found determine the current situation. The documentary research was carried out accompanied by a systematic search in the Scopus, Pro Quest, Springer Open databases, among others, which allowed us to identify the most outstanding authors for this study, for which they passed a meticulous filter respecting the statement PRISMA. It began with 191 studies and after a detailed systematization, 15 studies were taken that met specific characteristics and factors for this study.

Keywords: Knowledge management, knowledge creation, knowledge transfer, application of knowledge.

INTRODUCTION

Over the years, the importance of knowledge and its management have focused on its application in different contexts and its competitiveness in order to generate higher levels of performance. Educational organizations are also getting involved, like any type of organization, they have experienced a growing interest in improving their competitiveness and their levels of academic performance. Likewise, the interest of higher educational institutions (IES) is tilting knowledge towards science and scientific research, therefore its purpose is to spread knowledge.

Therefore, knowledge-related management is essential in HEIs, since it seeks to improve processes within the organization, strengthens innovation through the dissemination of knowledge, culture and experiences of teachers, researchers and students, which seeks improvement in the educational aspect and that must be continuously, since skills and abilities are developed that significantly influence management decision-making, which allows educational entities to be immersed in the improvement.

To this must be added the advancement of technologies, since they promote the achievement and appropriation of knowledge, it also provides the appropriate tools to students to be able to investigate and be able to generate knowledge and learn processes that will serve them in their interaction with others members of society.

It should also stick to innovative initiatives to transfer knowledge within institutions. According to (Araya-Guzmán et al., 2019) they argue that HEIs must have external sources to be able to access updated information, which will allow them to transform the reality of society

The goal of knowledge management is to achieve that during the interaction between colleagues within a work environment, team members can learn from others through the practice of experiences that may arise in a context, this is done to be able to propose alternatives to guarantee quality education for students. For this event to be more strengthened, it requires the reinforcement of materials that facilitate its processes, for example, the presence of technology is necessary, platforms that have variable and friendly structures in which mechanisms that contribute to development are implemented. of the various types of intelligence in the training field, as a starting point for education. It seeks to launch a proposal that is based on procedures that are related to management linked to knowledge, where the strategies of higher entities prevail to support coordinated work in the various areas.

MATERIALS AND METHODS

To achieve the purpose of this article, the systematic review of articles published under the parameters according to the checklist of the 27 elements and the flow diagram provided by the PRISMA Declaration was proposed. A comprehensive review was carried out on the Scopus, Ebsco, Pro Quest, Springer open databases and among others. 191 articles related to the topic to be addressed were found, establishing as one of the inclusion criteria, a search period between the years 2018-2020. Likewise, an investigation of the literature related to the research article was carried out, such as: Articles on knowledge management in basic education, articles that address knowledge management in higher education and its prevalence or incidence, also articles such as management of knowledge and the creation of knowledge and / or dissemination of knowledge or application of knowledge that become the criteria of the variable or dimensions.

According to the information collected, filter processes were carried out following the standards and recommendations of the PRISMA statement, where the following flow diagram could be considered, which

shows the studies that were selected as mentioned above; the search through the databases yielded a total of 185 documents, of which 6 are additional records from other sources and altogether there were 191 citations due to: firstly, the exclusion due to duplication, 44 articles were excluded; Likewise, in the second filter at the title and abstract level, 45 were excluded and finally in the third filter by methodology and conclusions, 30 were excluded, which after the analysis of the selected articles is not sufficiently associated with the information related to our research objective, leaving as a result 15 articles that meet the criteria for inquiry.

RESULTS

PRISMA 2009 Flow Diagram

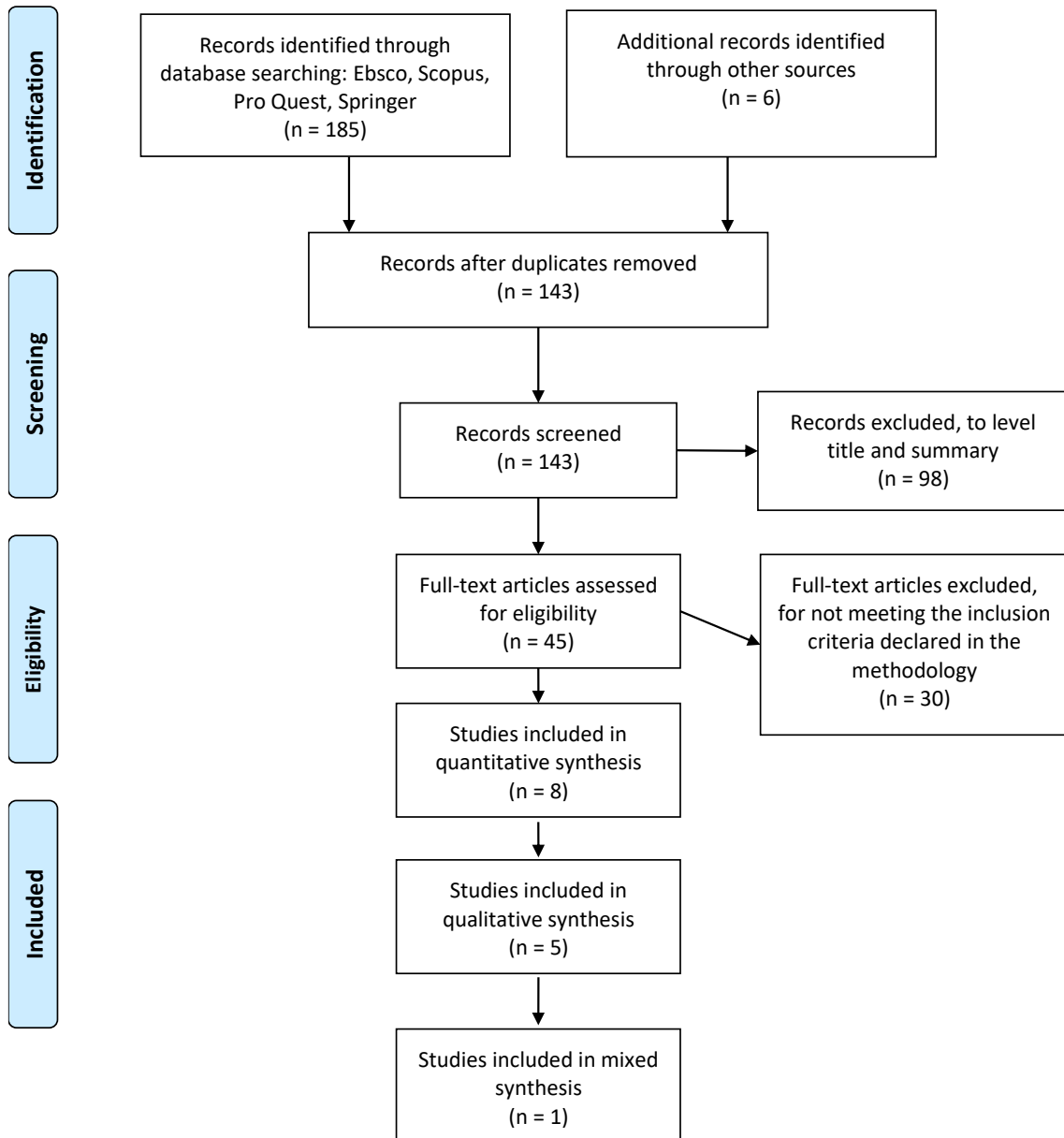


Figure 1. Adaptation of PRISMA Flow Diagram.

Table 1. Research included in the systematic review

No.	Authors	Knowledge management of education at the higher level			Methodology	
		Knowledge creation	Knowledge transfer	Knowledge application	Type of study	Instrument, technique or methodology used.
1	Acevedo-Correa, Y., Aristizábal-Botero, C. A., Valencia-Arias, A., & Bran-Piedrahita, L. (2020).	X			Quantitative	Poll
2	Araya-Guzmán, S., Ramírez-Correa, P. E., & Barra, A. (2019).	X			Quantitative	Poll
3	Bermúdez, C. W., Coronel, V. C., Ordoñez, M. del R., & Buñay, J. P. (2018)			X	Quantitative	Poll
4	Bernal, L. M. G. (2019).	X	X		Qualitative	Interview
5	Cuadrado-Barreto, G. (2020).	X	X	X	Quantitative	Poll
6	Del Tránsito, I., Córdova, P., Alexander, J., & Carrillo, R. (2019).		X		Mixed	Poll
7	Ferrero de Lucas, E., García Rodríguez, M. S., & Cantón Mayo, I. (2020).	X	X		Quantitative	Questionnaire
8	González-Campo, C. H., García-Solarte, M., & Murillo-Vargas, G. (2020).	X			Quantitative	Questionnaire
9	Guzmán Duque, A. P., Oliveros Contreras, D., & Mendoza García, E. M. (2019).			X	Quantitative	Poll
10	Jiménez Sierra, D., Jiménez Sierra, Á., & Redondo Cala, P. (2019).	X	X		Quantitative	Case study
11	Milla Calderon, L. E., Martelo Gómez, R. J., & Peña Pertuz, M. (2018)			X	Qualitative	Interview
12	Morales Espíndola, M. G., Moreno Cortés, K. C., Romano Cadena, M. M. del S., & García Alarcon, M. del R. (2020).		X	X	Qualitative	Interview
13	Rodelo Molina, M. K., Jay Vanegas, W., Torres Diaz, G. A., & Flórez Guzmán, Y. (2020).		X		Qualitative	Interview
14	Vázquez González, G. C., Jiménez Macías, I. U., & Juárez Hernández, L. G. (2020).		X	X	Quantitative	Questionnaire
15	Vidal Moruno, M. (2019).		X		Qualitative	Poll

Table 1 displays the general search results.

57.1% of the studies correspond to the knowledge creation subcategory (4 of the 7 studies show an interrelation with the other subcategories). 44.44% to knowledge transformation (4 of the 9 studies show interrelation with

the other subcategories). 50.0% to the application of knowledge sub-category (3 of the 6 studies show an interrelation with the other sub-categories). 40.0% of the included studies were quantitative approach, 33.3% correspond to the qualitative approach and 6.7% belong to the mixed approach.

When analyzing the results, it was found that the beginning of knowledge, its transfer and its application were subcategories that prevail in the incidence of management related to knowledge in higher education. These, with the purpose of developing a focused and coherent discussion with the objective of this research, are discussed below.

The entities' knowledge management becomes advantages that they must make the most of, becoming a competitive advantage that must be maintained over time, through relevant strategies related to the goals of the organization, which seeks to be achieve better quality products, where the resources and strengths of higher education institutions can be optimized.

In relation to the creation of knowledge, those responsible for higher education institutions seek to translate knowledge into activities that can be specified and where interaction between peers is achieved and they can carry out inter-learning through the experiences that It implies teamwork within an entity, there are always strategies that seek to strengthen the learning processes within the entity linked to higher education, this is achieved by performing a set of practices. (Jiménez Sierra et al., 2019). The studies carried out frame that it is important that various techniques are applied that facilitate that people who interact and can expand their skills in situations where they must carry out activities that demand the qualities of the members of the work teams. This will be achieved through the implementation of strategies that promote learning through five guidelines: identifying needs, building and being part of the processes that involve the appropriation of knowledge to achieve the development of skills in higher education students.

Knowledge management has also been related to leadership in a study at the higher level, it should be noted that the transactional type has an impact on the knowledge generation dimension (González-Campo et al., 2020). By generating academic and scientific knowledge, we can relate it to the search for efficiency and performance levels in higher entities who need leaders with characteristics of leaders to face challenges in society. In the same way, through Knowledge Management, they are known because activities are accumulated and developed there so that knowledge can be provided and strategies are proposed so that members can take ownership of the knowledge in improvement of the projects that are proposed In improving society, these are intangible assets, this system makes it possible to democratize knowledge, based on them it is proposed to create technologies that allow the accumulation of knowledge to be shared, and contribute to research.

Collaboration between people to share their knowledge, in a context where institutional values matter, with which it is possible to positively influence organizational performance, mainly focused on meeting goals and adapting to the environment of constant changes. (Araya-Guzmán et al., 2019). In addition, it is very important in the creation of knowledge in any institution especially in higher level education takes into account: epistemological and ontological. The first refers to the direct relationship with tacit and explicit knowledge, in turn this is achieved personally through experiences, intelligence, technology. The second type of knowledge is shown in the interaction with the other members of the organization in order to solve difficulties based on the culture that is shared, respecting the manuals that have been implemented.

The research reviewed shows that those in charge of higher-level institutions externalize the transformation of knowledge of the tacit type to move to the explicit through activities that motivate participation among colleagues, which will allow learning between them, since it can serve them metacognition through them if some of the members may have any doubts about the processes. (Jiménez Sierra et al., 2019). For the conversion of knowledge, various strategies are being applied in the various higher institutions where each individual executes experimental learning, that is, he learns by doing, practicing and exercising, that is, they are experiential and contextualized activities.

Likewise, higher-level study houses are also considered as centers where interactions that generate new knowledge take place and that if the team members participate, better transfer processes can be established (Acevedo-Correa et al., 2020) in such a way that the production of scientific knowledge and its transfer should be promoted by applying and promoting strategies from a knowledge with a tacit to an explicit context. Managing knowledge is to prepare and migrate to this new trend called the knowledge society.

Currently, students have various learning processes where they go from basic to more complex learning, depending on the spaces they have to strengthen it and achieve advanced knowledge (Ferrero de Lucas et al.,

2020). Higher level teachers have been using and applying the strategies that are helping their education students to develop their skills in such a way that if they will be teachers in the future then they are responsible for training the next generations.

It is proposed to create a series of mechanisms that can initiate a culture of know how (know-how) based on the knowledge that is visualized in each individual who possesses skills that will serve companies. (Bernal, 2019). As can be seen, the operational perspective of the procedures that make up management linked to knowledge changes and is modified depending on the objectives of the knowledge that needs to be managed and the nature of that need. The previous examples graph, for example, organizations that need to retain knowledge or that manage their knowledge on the basis of continuous improvement that increases their competitive probabilities in the market, or simply manage it in order to measure all their potentialities and capacities to make a better use of it.

In relation to the transfer of knowledge, the integration of curricular transversality promotes a relevant dynamic, academically and socially in the development of competencies and integral human formation, because these allow the management of knowledge and reaffirm the social needs for which it is the students prepare (Rodelo Molina et al., 2020). This curricular transversality promotes dynamics in the academic and social aspects. In today's society, the integration of committed citizens is urgent where they will demonstrate their social skills in the face of challenges and adversities that we may have to face, likewise the practice of values and good attitudes is observable.

The quality that the institutions that invest in their implementations with materials have been providing, constitutes a capital that has a positive influence when it is implemented with the appropriate technology for the goals that have been proposed, it is provided in public and private schools where knowledge is cultivated, that place is the universities (Del Tránsito et al., 2019). The incidence of knowledge management focused on human capital has a positive influence on the creation of technological knowledge. In the same way, the exchange of knowledge through which entities can ensure quality learning in the higher field, where they specifically identify knowledge in different contexts to be able to solve difficulties and can generate the reasons that are necessary to achieve with success.

Likewise, a study addressed the structure of the maturity of Knowledge Management to achieve innovation in the educational field, which shows the effectiveness of the organization's skills, in order to promote spaces that can generate innovation, which They can be saved for the use of other participants in an organization, which will serve as models. (Vázquez González et al., 2020). For this reason, the impulse of innovation in higher educational entities, for this it must go through a series of protocols such as identifying the key areas, activities, strategies, techniques or methods that will be applied for the process of knowledge conversion and its transfer.

Human resources and other inputs show the state of the organizations in terms of the use of the elements that the interrelation between the members of the work teams requires, with which it is sought that the organizations can solve the difficulties in the construction of the research that provides a better quality of life in higher education. (Cuadrado-Barreto, 2020). Teachers and managers, having the clearest vision regarding the execution of their models and strategies for the development of knowledge, have also seen as convenient the validation of instruments that can evaluate the reality of the company, its processes and its transfer of knowledge to carry out the proposed activities in the best way.

When the knowledge implementation process occurs in specific contexts, innovation is achieved, when difficulties are resolved for the benefit of a group, here the transfer is carried out successfully where knowledge is shared and applied to improve a reality. (Vidal Moruno, 2019). The studies carried out indicate that research is the fundamental axis of what to do university academic and for this the acquisition of knowledge is given in appropriate ways considering the how, when and for what in order to constitute alternatives to think about processes of intellectual production. The entities linked to education are spaces where the acquisition of knowledge and the transmission of the same is fostered through different strategies that make the participants develop their skills and strengthen themselves through strategies that are being implemented in order to innovate in problem soulcines, it is decor that the abilities of each member are specified and manifested to share with others in an explicit way, thereby achieving the fact of sharing knowledge that brings benefit to the company. This transfer of knowledge gives the organization an advantage over the others, since it becomes a strategy against the competition. The management linked to knowledge allows to have assets that are considered intangible to achieve advantages that provide preferential spaces to society and manages to grow through the various changes that may occur, with this changes are made that can bring benefits for the total.

Regarding the application of knowledge, many higher-level institutions promote models for the transformation of knowledge and the strategies will depend on the organizations, since their application will depend on the

objectives they have (Bernal, 2019). The creation and organization of models as strategies are applied according to the situation and objectives that we focus on in such a way that they are adequate to develop the determined actions producing a series of benefits, including the transformation of knowledge.

It is important to establish the cause-effect relationship between the way in which the processes to acquire knowledge are developed and the advantages they bring when applying them (Bermúdez et al., 2018). It is advisable to guide higher-level institutions that wish to implement with Knowledge Management to obtain optimal levels of performance. Knowledge-related management is central to the professional growth of people who seek to improve themselves every day and learn steadily, giving rise to research that demonstrates their degree of specialization. (Guzmán Duque et al., 2019). Society requests citizens capable of contributing scientifically and technologically, for this reason critical thinking is one of the main competencies that the student develops; Likewise, the investigative process that is promoted for its improvement is important by developing the competencies of being, knowing and being.

A clear example of the current situation that we are experiencing the COVID-19 pandemic requires us to permanently incorporate the use of ICT in educational spaces, to promote knowledge management through innovative experiences that show the way in which new virtual learning environments can be useful in classrooms (Morales Espíndola et al., 2020). Before this historical event, the educational system changed, making the migration to a new education and its diffusion; For the use of ICT, it had to be done, although it is good to note that some higher-level institutions were already putting it into practice, leaving aside traditional education.

Likewise, Knowledge Management encourages the dissemination of knowledge and its creation in the inquiries that can be made, to increase the understanding of the participants, since it is the only way to achieve long-term learning, (Milla Calderon et al., 2018). The application of Knowledge Management is very significant and satisfies the demands of academic contexts in which changes are generated in their environment and society generated by scientific and technological research management projects and publications in magazines, conferences, events, etc.

So, for this reason, the implementation of Knowledge Management meets the requirements demanded by the centers that promote research, which seeks a change in society showing a change in progress (Milla Calderon et al., 2018). The entities that are related to higher education are systems that arise in society, which serves to process, create and transfer knowledge, through strategies that are implemented in order to achieve research to have as results people who have knowledge and are able to resolve their difficulties in order to access a better quality of life and grow in a personal and professional way. Also, it is sought that study routines are established so that they can apply the processes that serve them improvement, this efficiently influences the development of organizations, in addition to gaining prestige in terms of the activities they carry out.

CONCLUSIONS

It is necessary to implement mechanisms that seek to strengthen Management linked to Knowledge, so that information is shared through interactions with team members and leadership, which brings benefits to higher-level Institutions. Given this, the benefits of technology must be fully exploited to make plans possible in various contexts. This provides greater access to information, in such a way that it allows them to create a competitive advantage among higher-level institutions.

Knowledge-related management is based on collaborative work, where the members share the goals and assume the commitment to efficient work, where a shared culture of coordinated work is fostered where everyone has the same objective, and that work is done to achieve them and give them the benefit of success.

At present, knowledge-related management makes higher-level institutions play an essential role in promoting the transmission of knowledge through innovations such as science, technology and scientific research in order to disseminate their knowledge and apply them in a way. in such a way that they provide quality services for the intellectual development and growth of the student.

Finally, systematic reviews provide guidance and knowledge of intellectual interest, in this case on the incidence of knowledge management that helped us focus and broaden the horizon in higher-level educational institutions with the sole purpose of assuming challenges in the face of this changing world.

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