A Methodological Proposal to Manage Knowledge in the Organization of School Events

Alonso Perez-Soltero[1*]
Rosalva Salcido-Flores[1]
Jose Luis Ochoa-Hernandez[1]
Mario Barcelo-Valenzuela[1]
Gerardo Sanchez-Schmitz[1]
Miguel Enrique Lopez-Muñoz[1]
[1]Departamento de Ingeniería Industrial, Universidad de Sonora, México.
[*]Corresponding Author: Web: http://www.aperez.mx Email: aperez@industrial.uson.mx

Abstract

Educational institutions work with knowledge intrinsically; however, knowledge management is barely implemented to benefit from the knowledge their teachers possess. Schools offer their students a wide variety of activities such as academic events, and the way these events are developed are a reflection of the school's efficiency and organizing habits. Therefore, taking advantage of the experiences acquired by the organizers of events allows a general improvement in events and presents a well-organized staff. This project was carried out in an educational institution in Mexico that holds school events every school year. As a result of implementing a suitable knowledge management model based on literature, through the usage of documented libraries and metadata taxonomies as knowledge management tools, errors that have occurred before are now avoided and a very organized team and synergy between all the members of the campus is portrayed.

Keywords: Knowledge management, events organization, documented libraries, educational institution.

1. INTRODUCTION

Educational institutions work with the knowledge of teachers, administrative staff, students and collaborators, which sometimes is not used to improve their daily activities (Johnson, 2003; Bell et al., 2004; Flores and Pérez, 2010; and Min, 2017). Dowling (2003) and Ashraf et al. (2018) agree that schools, in general do not take advantage of the experience their staff possesses and therefore many problems arise. Some of the most specific issues described in their studies are lack of communication among teachers and school professionals, unsatisfactory results in overall performance of students, and bad decision-making due to the lack of background knowledge. Friend and Cook (1992) express their concern on the same problems and present a set of proposals in order to maintain a synergy between the members of the school community. Team meetings, conferences, co-teaching and problem-solving among teachers are some of the suggestions made to address the sense of disconnection between employees which often were projected in school events, every day activities or when problems arose. Kidwell et al. (2000) believe identifying the key knowledge in the institution's activities, the holders of that knowledge, as well as finding a way to capture it and then share it with the entire organization, will impact in various ways

such as in the decision-making processes, in the planning of daily activities, in the communication between the staff and in the strength of the sense of belonging of the personnel. The previous authors concur that the basic problem is the absence of knowledge: wrong information, lack of experience, not enough support from leaders, to name a few.

With the idea of providing new approaches to solve the previous situation, a project was carried out in an educational institution located in the northwest of Mexico, specifically in the state of Sonora. The institution has a large number of school events such as academic contests, academic fairs, inns, talent shows, among others; which are repeated every school year. In the organization of these events, several activities are done such as the request for spaces and materials, assignment of responsibilities, preparation of teaching materials, assignment of counseling schedules, to name a few.

Due to the fact that the events are not planned using past experiences as a starting up point, there are some mistakes that can be avoided, for instance: extra expenses that exceed the budget of the institution, waste of time, complaints by parents, unfavorable results in academic contests and many more. Besides, when a person who has experience in a certain event leaves the institution or changes position, knowledge is not used and even lost, since the new person who is now responsible for organizing the event begins to plan without that valuable knowledge.

The objective of this paper is to present a methodological proposal, in which taking into account the organizational culture of the institution, it is possible to identify and apply the most appropriate KM tools to take advantage of the experience people have to successfully organize school events. What this project intends to do is to develop a methodology to manage knowledge in the organization of school events, will allow to efficiently organize new events and avoid the repetition of previous errors.

The structure of the document starts with a conceptual framework where the most important concepts related to the research topic are described. Next, the description of the problem of the case of study is detailed to later develop the methodological proposal. Then the results and benefits are shown, and finally the conclusions of the study are presented.

2. CONCEPTUAL FRAMEWORK

In this section, the topics that sustain this research are addressed, specifically the topics of Knowledge Management (KM), organizational culture and academic events, followed by a review on KM models.

2.1 KM in Educational Institutions

Organizations have given importance to the implementation of techniques and technologies to manage their knowledge in order to improve the quality of the contributions that people provide to the organization. Carrol et al. (2003) as well as Kurniawan (2014) consider that, in schools, the concepts, tools and techniques of organizational KM can be applied through different initiatives that promote the most professional attitudes of the staff. KM is key to take advantage of people's knowledge in the path of compliance with the goals of the organization as indicated by Petrides and Guiney (2002) and Ling-hsing and Tung-Ching (2015).

With this in mind, Bukowitz and Williams (2000) mention the importance of using a KM model to use the knowledge of people within any organization since probably one or several stages of a model are intuitively performed in daily activities. However, without a model or methodology with defined activities to follow, it is difficult to have an order and really use the experiences of people to their full potential. Therefore, they would be

skipping steps that can be essential for identifying the knowledge that really brings improvement to the organization to the way it can be shared so that it suits to their organizational culture (Khotbanch et al., 2015; and Haris and Yunus, 2018).

2.2 Organizational Culture in Educational Institutions

Having collaborative environments that can favor a KM implementation is a result of the ideal organizational culture according to Soliman and Spooner (2000). The organizational culture can be defined as the way to carry out the activities of each organization with its own scenario (Tierney, 1988). Dalkir and Liebotwitz (2011) define it as the set of codes, symbols, practices, traditions and ways of thinking and acting in the organization.

By giving the necessary importance to the organizational culture in schools, several studies have been carried out that sought to define what the culture is like within them. Cameron and Quinn (2011) created an instrument to evaluate the organizational culture in organizations called Organizational Culture Analysis Instrument (OCAI) which classifies the organizational culture into four types: clan, adhocracy, hierarchy and market.

Berkemeyer et al. (2015) analyzed 40 German schools using the OCAI tool designed by Cameron and Quinn (2011). In this study of 40 schools, 1,058 teachers were interviewed (in the year 2007) and 773 (in the year 2008) and as a result in both years, the type of organizational culture of most schools was a clan type culture. Additionally, Hayden et al. (2015) conducted a study in Lima, Peru using the OCAI system in 32 secondary schools. They analyzed the four dimensions used in the Cameron and Quinn system and also obtained as a result the presence of a clan type culture.

The clan-like organizational culture has been described by Cameron and Quinn (1999) as a culture in which participants share goals and values, they are participatory, and there is individuality and a sense of belonging.

The technological tools that should be used in a clan-like culture to work in the organization should be selected according to their characteristics, therefore, it should be a tool that allows collaborative work among its employees. This tool, besides being easy to use, should allow people to be heard, involved and with an equal autonomous sense in their work (Barrera-Corominas et al., 2014; and León, 2014).

2.3 Organization of School Events and KM

An element that is always present in a primary school is the organization of school events, such as academic competitions, student parties, educational fairs, sporting events, among others; and it is important to carry out a strategic organization to save costs, reduce time, and improve customer satisfaction. Each event has a different objective and different elements, but all of them have similarities in their organization process (Müller, 2015).

Muskat and Deery (2017) assure that although there is substantial research in various elements of KM in all types of organizations, there is a gap in the transfer of knowledge during the organization of events. Collins (2010), Gaete (2011), Martínez (2015) and the Inter-American Development Bank (2017) state that managing knowledge allows organizations to learn from their mistakes and their success, based on the experiences of people, which can lead to an improvement of subsequent events.

2.4 KM Tools in Educational Institutions

The organizational culture in educational institutions provides a guide in the process of choosing tools that facilitate the implementation of a KM model. These tools, in order for

them to be compatible with the clan culture, should be focused on people and promote collaboration for decision-making (Leidner et al., 2006; and Chmielewska-Muciek and Sitko-Lutek, 2013). In this manner, Khakpour (2015) suggests that the KM process should use methods in which people can feel comfortable expressing their experiences and lessons learned.

Dobrecky (2007), Flores and Pérez (2010), Young (2010), Dalkir and Leibowitz (2011), Quintanilla (2014), Daland (2016), Smith (2016), Leher (2017), Microsoft (2018), Vu et al. (2018) and Xiaogang (2018) describe a variety of methods and tools that can be used to support and improve the different processes of KM. Among the most outstanding and appropriate for educational institutions to promote the collaboration of their collaborators, documented libraries and lists can be found.

Documented libraries are data networks with information and knowledge that are logically cataloged so that users can easily manage them. They are safe places to store information, to work on knowledge collaboratively, and to share and access knowledge from any device. On the other hand, lists are content units, which by the usage of hierarchical taxonomies, are an aid for the organization of stored knowledge.

Rinnekangas (2017) and Microsoft (2018) explain the use of SharePoint as a knowledge manager with the tools mentioned above. SharePoint is also a platform in which you can access from any electronic device; it has lists, libraries, calendars, contacts, among other tools that serve to implement a KM model within a single program.

2.5 Knowledge Management Models

As an overview of KM models, Table 1 has been constructed in order to be able to see similarities in the steps of a KM implementation from a variety of authors who implemented and validated them in different types of organizations.

Table 1: Knowledge Management Models						
Wiig (1993)	Zack (1996)	Bukowitz and Williams (2000)	Leidner et al. (2006)	Dalkir (2005)	Bernal (2011)	Evans et al. (2014)
Create	Acquire	Obtain	Create	Create	Identify and acquire	Knowledge Requirement
Resource	Refinar	Use	Transfer	Evaluate	Socialize and Share	Identify and Create
Compile	Save	Learn	Stock	Share	Register and Preserve	Stock
Transform	Distribute	Contribute	Implement	Contextualize	Adapt and Create	Share
Implement	Present	Evaluate		Acquire, implement	Use	Use
				Update	Organizational culture and ITs	Learn
						Improve

A representation of the stages involved in the implementation of a KM model allows a more simplified view of what are the steps that should be taken into account as well as the order in which they must be performed. This is an aid to implement KM without leaving behind any steps that might be a priority to develop for the application to be a success.

2.6 Indicators of Evaluation

The implementation of a KM model will result in an improvement in the way the events of a school are organized and developed. In order to be able to compare the results from a previous event with a new one, indicators of evaluation must be assessed. Ruzafa (2011), Mendoza (2016), and Galan-Guarinos and Costa-Sanchez (2018) proposed indicators that can provide an evaluation of the events prior and after a KM model is implemented as well as an evaluation of the model as a whole as well as assessing the technological tools used. A representation of some of these indicators are shown in Table 2.

Having a list of indicators of evaluation from experienced authors who have successfully implemented KM models, provides a realistic and concise guide that will represent how well the implementation of the methodology proposed is being developed.

| Table 2: Indicators of Evaluation |
|---|
| All of the established steps in the protocol or agenda are developed. |
| The protocol turns towards the improvement of processes. |
| The role of each participant in the practice is clearly seen. |
| Roles are assumed autonomously. |
| Collaborative participation is encouraged. |
| Easy to use. |
| Flexible to the demands of different jobs. |
| Able to store, process and interpret data and information. |
| It saves time in the accomplishment of tasks. |
| It facilitates communication between everyone and with the outside world. |
| Number of participants |
| Accreditation of the event |
| Presence of the press, advertising |
| Results: Winners, Accreditations |

3. METHODOLOGY

The study is exploratory and descriptive. It is an exploratory investigation since the results obtained are a vision of the procedures, documents and results that are used in the institution to organize academic events. This investigation is also descriptive because it provides a detailed description of the events, activities, people in charge, and spaces, among other details that the organization of school academic events demands.

The organizational culture of the institution is considered to determine the most appropriate KM strategy in order to choose the most suitable activities and tools to take advantage of their valuable knowledge. Selecting KM tools considering the organizational culture of the institution provides a more beneficial environment that enables the implementation of KM initiatives, ensuring that people are committed and convinced of the advantages of using their knowledge to achieve the goals of the institution.

As a result of analyzing different models to manage the knowledge as the ones proposed by Wiig (1993), Meyer and Zack (1996), Bukowitz and Williams (2000), McElroy (2003), Dalkir (2005) and Bernal (2011), the decision is made to design a methodology that has similar stages to the models studied, being influenced by the organizational culture of the institution that impacts the choice of related tools with a clan like organizational culture.

The proposed methodology is represented in Figure 1, in which four stages are defined with activities in each one of them. The first stage is to identify and/or create knowledge based on the methodology proposed by Bernal (2011) and Wiig (1993) since they consider that in order to begin a KM implementation, there should be an initial diagnosis followed by the creation of knowledge based on the experiences of the staff.

Figure 1: Knowledge Management Methodology
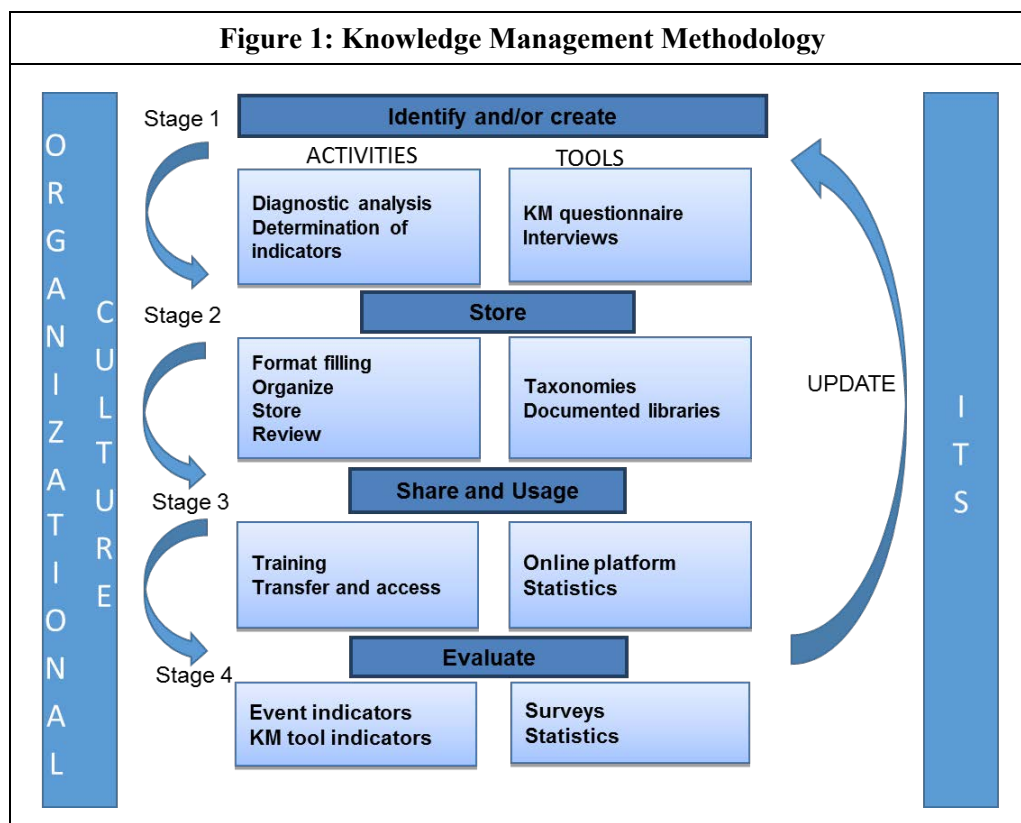
The second stage is to store information taking the similarities in Leidner et al. (2006) model which states that the created or found knowledge must be documented and saved. Followed by stage three, which consists of sharing and using knowledge, taking as a reference the models of Meyer and Zack (1996), Dalkir (2005) and Bernal (2011) in which they emphasize the significance of the usage of the knowledge that has been previously identified and stored.

Subsequently, the methodology includes a fourth stage to evaluate knowledge as expressed in the model of Bukowitz and Williams (2000) since they mention the importance of evaluating in order to obtain improvements based on the measurement of the success of the implementation; and finally, putting emphasis on creating the habit of updating used knowledge and/or adding new knowledge as observed in the model of McElroy (2003) and Dalkir (2005) since with each new experience, new and improved knowledge is obtained. All stages are immersed in the organizational culture of the institution and the use of information technologies to support its implementation (see Figure 1).

4. RESULTS OF THE IMPLEMENTATION

This section gives an account of the implementation of the methodology which has been developed in an educational institution in the primary area. Each of the activities that make up the phases of the methodology are described in order to achieve the objectives of the project.

Stage 1: Identify and/or Create

In stage 1 of the described methodology, various initial activities are carried out: the diagnostic analysis of the institution, the initial determination and assessment of indicators, as well as the identification of knowledge.

Diagnostic Analysis

The first activity of stage 1 of the methodology consisted of visiting the institution to let the school principal know the importance of the KM for decision making and for the improvement of their daily activities. Based on this and the priority granted by the institution, it was decided to implement a KM methodology in the primary area focusing on the organization of school events of the institution.

To start the diagnosis, a questionnaire (see Appendix) proposed by Arceo-Moheno (2010), which was modified to meet the objective of the school, was applied to evaluate how the personnel document and share their knowledge in the organization of school events. To apply the questionnaire, the Google Forms tool was used, since the institution has internet access and it was easier to obtain the answers when interviewing teachers between school hours and the administrative staff in their respective offices.

The result obtained from this diagnostic questionnaire allowed to identify the areas of opportunity of the institution which are: the operation of human resources management, the continuous encouragement of employees to generate new knowledge and ideas, the role that employees play in innovation and the communication among everyone. In addition, in terms of training and communication, having databases with up-to-date processes and the internal publication of information to employees are seen as areas of opportunity. In the aspect of context and culture, the areas of opportunity include continuous modification to improve processes, the excess of changes in terms of structures, and the identification and adoption of best practices. In terms of technology, it needs improvement specifically in the

training and the usage of IT to consult and access knowledge, and the use of IT to share, publish and transmit knowledge. And finally, the aspect of documentation shows the following three areas of opportunity: updating of procedure databases, the dialog and its corresponding documentation with the elements of the environment, as well as the access to specialized information.

Initial Determination and Assessment of Indicators

In addition to the diagnostic analysis on KM, it is necessary to evaluate based on indicators that allow visualizing the impact of the implementation of KM. That is why the evaluation of indicators of each event was carried out by the coordinators, teachers and administrators. This was done in order to have data that allows to visualize if there is an improvement after managing the knowledge of events. Table 3 shows the average of the evaluation of indicators of the mental calculation event of the 2018 cycle.

Table 3: Indicators of Evaluation of Mental Calculation Event.				
Indicators of Evaluation	Eval 1	Eval 2	Eval 3	Eval 4
The event and it's organization overall: **Scale 1-5 being 1 the least frequent and 5 the most frequent**				
All of the activities in the institution are developed as planned in the agenda.	5	5	5	5
The role of each participant is clearly observed.	4	4	4	4
Collaborative participation is promoted.	5	4	4	4
Comments and afterthoughts contribute to the development of the activities.	4	4	3	4
An evaluation or wrap-up of the event occurs with documented lessons learned.	1	1	1	1
Everyone is aware of the purpose of the event.	5	5	5	5
Established time is strictly followed.	4	4	4	4
Overall accreditation of the event: Excellent, Very good, Good, Regular, Bad	3	4	4	3
Average	**3.88**	**3.88**	**3.88**	**3.88**
Expectations of the event.				
Participants: Number of attendants.	5	5	5	5
Press, publicity: Amout of journalists or publishes.	4	4	5	5
Results: Favorable or unfavorable results.	4	4	5	4
Average	**4.33**	**4.33**	**5**	**4.67**
Total Average	**4.10**	**4.10**	**4.38**	**4.21**
	Total Average		**4.20**	

Identification of Knowledge

The second activity proposed within the first stage of the methodology is to identify knowledge. The first step is to identify which are the events that take place during the

school year. This was done in conjunction with the coordinators and the secretary who identified the elementary events in the internal school calendar of the institution.

After identifying all the school events, the coordinators and secretaries gathered requirements, videos, photos, messages and any other documentation they had of each of the events that are needed to organize them. The information collected was used in the next stage of the methodology.

Stage 2: Document and Store

In this stage, knowledge was stored in knowledge formats. Taxonomies to be used were identified and knowledge was captured in the documented library in the office 365 SharePoint platform to finally carry out a review with the experts to inspect that there wasn't information lacking.

Documentation Through Formats

The information gathered in the knowledge identification stage was filled into Excel formats mentioned above and stored in the first stage in the coordinator's computer in charge of organizing the information provided. Examples of the results of knowledge documentation in the formats provided are shown in Tables 4, 5 and 6. According to the specifications of the school, the format shown in Table 4 can be omitted depending on the event.

Table 4: Nature of the Event					
Name of School: Irish					
Area:	Spanish	Start time:	9:00	End Time:	1:00
Date of Planning:	October 20	Made by:	Paola		
Name of the Event:	Altar de muertos				
Date of the Event :	November 2			Lugar del evento:	SUM
Objective:	Show students about mexican culture				
Accountable:	Coordinator and teachers				
Nature of the event:	Cultural				
Activities of the Event	Gather up, construct, present				
Attendants:	Students and parents				
Reach of the Event:	Private				
Invitation Method:	E-mail				

Organize Knowledge Through Metadata: Taxonomies

To carry out this step, the keywords that benefit the user in the rapid identification of the documented knowledge were identified. In this case, the taxonomies classified by category are considered, which are shown in Table 7.

After carrying out this step, it was important to identify which files were to be described by the defined taxonomies, without forgetting that the folder in which they were added should also contain the taxonomies that describe the name of the event and the school cycles to which their files belong.

Table 5: Requirements for Event			
Checklist for Event			
Date of Request:	October 20, 2018		
Applicant:	Miss Paola		
Who Receives and Reviews:	Miss Diana Bustamante		
Received Date:	October 20, 2018		
Area:	Elementary Spanish		
1. Date of the Event:	November 2, 2018		
2. Place of the Event:	SUM		
3. Type of Event:	Cultural Altar de muertos		
4. Number of People:	50		
5. Start Time:	09:00		
6. End Time:	14:00		
7. Equipment:	Yes	No	Quantity
Microphones			
Musica			
Speakers	Yes		
PC / LAP TOP			
Screen			
Overhead projector			
Logo Acrylic			
Logo flags			
Tablecloth			
Logo Tablecloth			
Tables	Yes		10
Chairs			
Flower arrangements			
Altar:	Yes		
8.Food and Utensils:	Yes	No	Quantity
Water			
Coffee			
Spoons			
Plates			
Napkins			
Sodas			
Forks			

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Coffee Glasses			
Snacks			
Specifications			
9. Distribution: (Draw the Distribution of the Room) Chairs in horseshoe with a chair next to it			

Table 6: Lessons Learned and Good Practices			
Name of the Institution			
Area: Spanish	**Event: Mental Calculation Contest 2018**		
Date of the Event: January 18, 2019 at SUM			
Activity	**Did it Work?**	**What activities should continue?**	**What should change?**
Communication	More or Less	Invitations, messages sent home, alarms	Send them on time
Place and Date	More or Less	Space was OK	If there are more students a bigger space will be needed
Participation and Attendance	Complete	Messages	
Costs			
Logistics	Yes	Keep dividing them in groups	Bigger groups need to be divided.
Activities of the Event	Yes	Telling them the objectives of the event.	
Extra			Younger kids start to misbehave. Give them recess.

Table 7: Taxonomies		
Name of the Event	**Date**	**Type of Informaion**
XXX	2017	Nature
YYY	2018	Requirements
ZZZ	2019	Lessons learned
		Photos
		Videos
		Extras

Capture Knowledge in Documented Libraries and Lists, as Well as Their Relationship

The next activity consists of capturing the knowledge in the documented libraries. In order to do so, an institutional account is required and the access to create a documented library. As a next step, the adding of the folders and documents in the documented library is done,

starting with folders with the title of the event in general, followed by a folder within the general folder with the name of the event and the cycle it belongs to, the documents of that year in question which are the ones mentioned above, plus photographs and videos. An example is shown in Figure 2.

Figure 2: Documented Library

Finally, it was necessary to add a column to the documented library to relate the taxonomies with the documented files. An example of how the tags were captured by event is shown in Figure 3. Another example of the documented library with its documents and its taxonomies is shown in Figure 4.

Review Documented Knowledge and Choose Users with Access
To avoid missing documentation, the experts reviewed that none of the folders was missing any documents, photos or videos. Once the knowledge review was done, people who would

Figure 3: Taxonomies in a Documented Library

Figure 4: Taxonomies and Documents in a Documented Library

have access to the documents were enlisted and an invitation was sent through SharePoint to use the platform, which they had collaborated to feed with knowledge and experiences. It is important to mention that people with access to the documents will have the right to review each of them; however, only the coordinator, director and academic secretary will have permission to modify, add and delete files.

Stage 3: Share and Use
Once the platform was ready with documents and ordered lists, it was proceeded to train users on how to use SharePoint, followed by the usage of the platform to transfer and share knowledge.

Train Users in the Use of Tools
The first activity of the third stage was to train all the people who use the platform to organize school events. To achieve this step, each person was individually trained in the use of the platform because their schedules did not coincide and they had only restricted moments to receive the training.
They were informed about what KM is and how it could help them in their day-to day life. Subsequently, it was shown how to access the platform, add documents, consult them and modify them. In addition, emphasis was placed on the importance of adding photographs, videos and other documents such as invitations, among other files, to offer more detail to the event.

Knowledge Transfer and Access
Once the platform was used, the usage of the platform was monitored, and users were approached to see if they had any doubts about its use. One way to monitor the usage of the

platform in terms of upcoming events was to use the SharePoint statistics tool. This was done by placing the cursor on the document to be reviewed and when the option of "views" was displayed, it was possible to observe how many people had accessed the file and how many times. An example is shown in Figure 5.

Use Knowledge as Consultation and to Develop Events
To know if the staff of the institution was using the documented knowledge and if they made the requisition through the platform, as well as shared their experiences learned and their good practices, the statistics from SharePoint were used to review the new collaborations made and their authors.
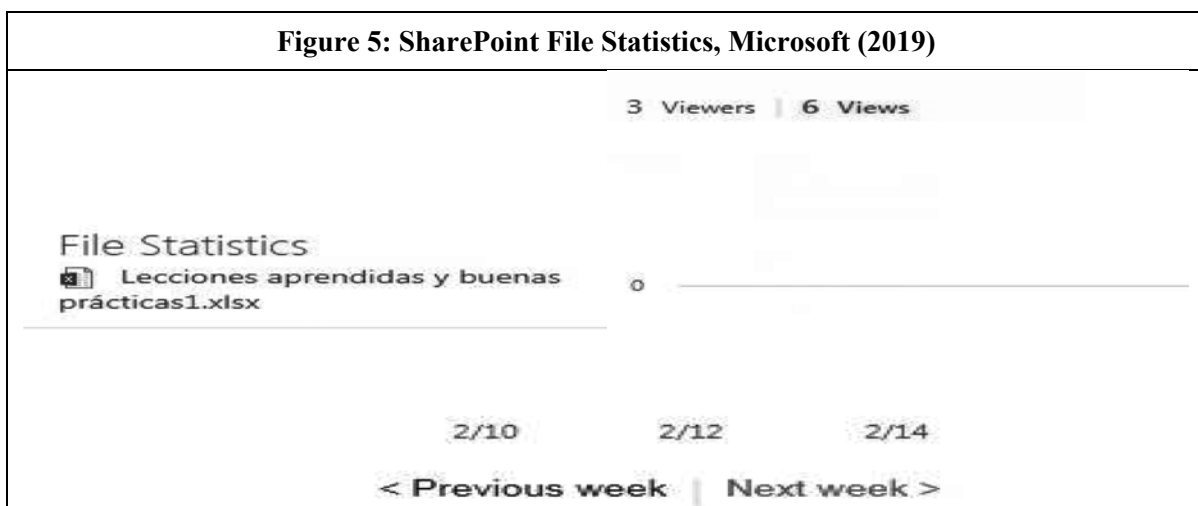
Stage 4: Evaluate
In this stage, the functioning of the methodology was evaluated through two activities: comparison of the evaluation of indicators by events and another comparison of the evaluation of indicators of the KM tool used.
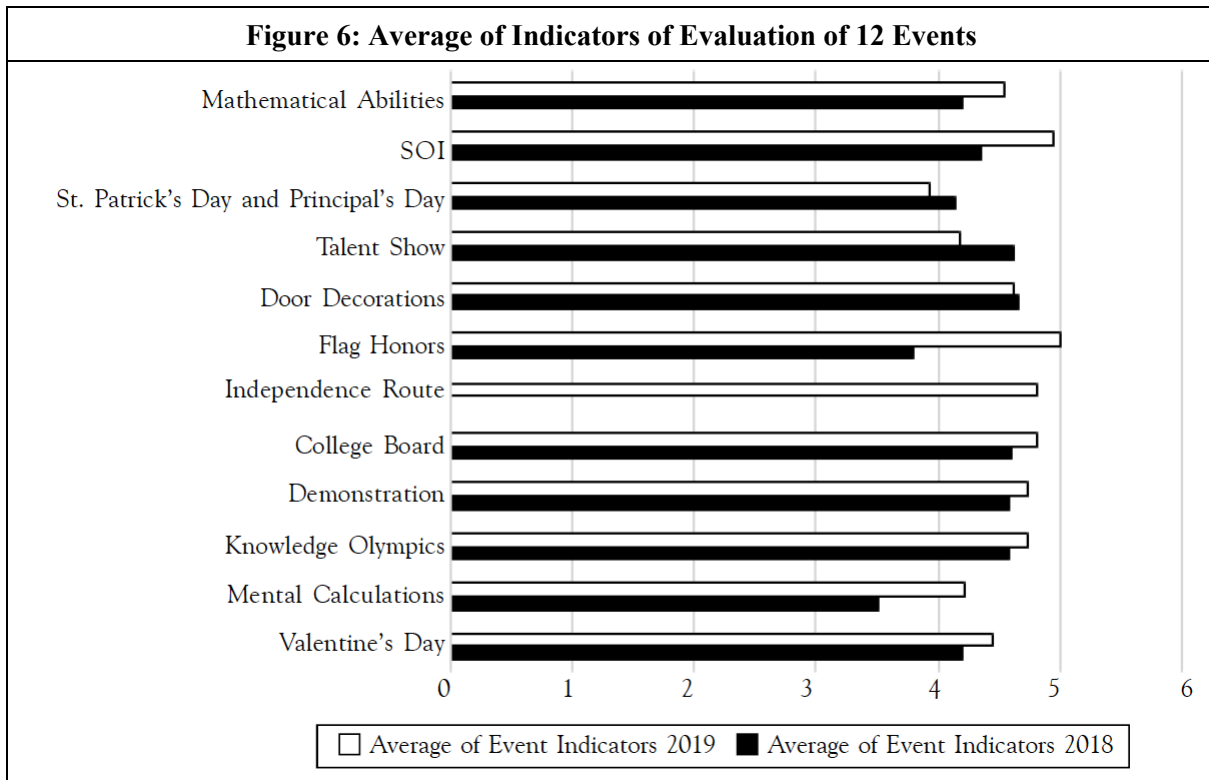
Evaluation of Event Indicators
In this activity, a comparison was made of the evaluation of indicators of the 2018 and 2019 events to analyze if there was an improvement in the way in which the 2019 events were organized after consulting the lessons learned from the previous events. To have a good comparison of the events held in 2018 and the ones in 2019, 12 events were evaluated with the proposed indicators.

Figure 6 shows the general average of the evaluation of academic events held in 2018 without using the KM methodology, and the general average of the events held in 2019 after documenting their experiences and lessons learned.

Results of evaluation of indicators of school events for 2018 and 2019: A general improvement of all school events was observed, comparing the events held in 2018 and the events held in 2019. The difference between the events held in 2018 and 2019 was the consultation of lessons learned and good practices of the events of 2018 to carry them out in the events of 2019.

Figure 5: SharePoint File Statistics, Microsoft (2019)

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Figure 6: Average of Indicators of Evaluation of 12 Events

Evaluation of Indicators of the KM Tool

Once the indicators were evaluated by event, the evaluation of the KM tool was carried out. In order to obtain a clarity of the way in which the tool has worked during the accomplishment of 12 school events, there were two evaluations made with the purpose of having a point of comparison that will show the performance that the tool had at the beginning and the contrast with its final performance. Therefore, it was necessary to evaluate the tool after being used during 6 events (50% of the events) and as a final performance, the other 50% of the events. The evaluation can be observed in Table 8.

Table 8: Indicators of evaluation of the KM Tool		
Usage of documented library	**1-6 events**	**7-12 events**
Usage: Number of people accesing/ No. of people with access	26%	47%
Update: Quantity of documents	105	131
Personal growth: Number of visits to the platform in order to learn and use knowledge.	125	220
Improvement: Documented lessons learned.	6	6
Change adapting: Number of ideas performed / Number of ideas suggested in past event	67%	80%
Time: Time of search of documents in seconds	34.53	32.55
Easeness of usage: Quantity of expressed doubts	4	1
Technology: Quantity of requirements done in platform/quantity of total requirement to shopping area.	0	2

Results of the evaluation of indicators of the SharePoint tool:

- The first indicator to be evaluated was the number of people visiting the platform among the number of people with access to it. An increase of 26% to 47% of users can be observed during the occurrence of the first 6 events against the 6 subsequent ones.
- The indicator related to the updating of documents in the platform increased from 105 initial documents to 131, where new formats of lessons learned, photographs, invitations, circulars, among others are observed.
- Regarding the improvement, referring to the number of visits made by the users to the different files in order to improve their performance, add information or just consult it, there were 125 visits in the period of 5 days prior to the first event until the sixth event and 220 visits in the period of 5 days prior to the seventh event until the twelfth event of the institute.
- Regarding the point of improvement, the collaboration was maintained to document the lessons learned, as well as comments and reflections from the people involved in all the events.
- At the point of acceptance of change, there was a significant improvement since in the first 6 events only 67% of the new ideas and comments were taken into account, while in the last 6 events 80% of the new ideas were applied, which was favorable in the organization of the events.
- The time of file search did not vary much because in the 12 events the average time ranged between 32.55 and 34.53 seconds per person, which is the minimum amount of time considering the number of files on the platform.
- The number of doubts that were presented decreased from 4 to 1 and were related to the management of the platform. Considering that the flow of visits increased, the decrease in doubts shows that the platform provides a friendly space which is accepted by users.
- The number of requests made by the platform increased from 0 to 2. In this case, the requisitions made in the period of use of the platform were counted; however, the requisitions made do not correspond to the events evaluated since they are sent to the purchasing department 2 months in advance. At first, requisitions were not done through the platform since the person who sent the requisitions had doubts about it and decided to do it the traditional way. In the subsequent period, the doubts were clarified and 2 requisitions were made for events that are calendared to occur 2 months later.

Stage 5: Update
In the final stage, the knowledge update is suggested and the activities are: feedback knowledge with lessons learned and renewed knowledge.

Feedback Knowledge with Lessons Learned
To feedback knowledge with lessons learned after each event, it was necessary that several people, either through interviews by the coordinator or by themselves, could document the experiences that the event had left them. The information captured on the platform grew, as new folders were added to each event and new documents were included.

5. CONCLUSION

The methodology of KM to organize school events was developed under three aspects: organizational culture, people and technology, and although all three have a very important role in the success of its implementation, people and their attitude, their leadership, responsibility and commitment, are the most influential aspects in the process to achieve the objectives of the institution.

The result of the implementation shows that there is an interest of the institution in taking advantage of the knowledge acquired based on the experience that they have achieved over the years. In addition, it shows the importance that the leaders of the institution have. If the people who lead the organization of the events work in making the lessons learned andgood practices of previous years available to the whole team, the other members of the team respond favorably, since it allows them to perform their tasks better and with the support ofthe coordinators.

The methodology meets the objective of improving the organization of school academic events, which can be implemented in any educational institution since its stages and activities are described in detail and a friendly technological platform is used.

The organizational culture of the educational institutions was identified to define the best KM tool that is consistent with the way the academic team works.

Indicators of evaluation were defined which allowed to measure the practicality of the KM methodology, the achievement of the objectives of the institution and the ease of use of the technological tool.

Based on the results obtained, the objective is fulfilled, in addition to complying with the hypothesis, since the development of the KM methodology used in the organization of school events allowed the institution to efficiently organize the events of the school avoiding the repetition of errors of past events, and documenting new knowledge to apply in the future.

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	Questionnaire	1	2	3	4	5
1.	The concepts of knowledge managment are familiar to you?					
2.	Human Resources: Classify the following sentences where 1 is Less Likely and 5 is Most Likely					
	a. Our human resources management functions well.					
	b. Our employees are mostly competent and professional.					
	c. The employees are highly motivated and engaged in their job.					
	d. The employees are continuously stimulated to generate and share ideas and knowledge.					
	e. All the employees play an important role in the innovation and their ideas are considered.					
	f. The strategy, mission, values and objectives are clearly defined, and employees are aware of them.					
	g. The job positions are well defined.					
	h. The culture and spirit of the school is positive.					
	i. Our communication is open and it involves every employee.					
	j. Teamwork is typical among us.					
3.	Training and Communication					
	a. Informal training among employees is given by observation of the experts.					
	b. The creative dialog and exchange of ideas is a habit in every department of the school.					
	c. The subjective opinion is allowed at every level.					
	d. The creation of manuals, documentation and good practices are necessary					
	e. There is a database with current information.					
	f. The dialog among clients, the complaints and suggestions are commonly documented.					
	g. Training is given by the same members of the school.					
	h. Every employee is given new courses from external agents.					
	i. We continuously publish internal information from our company to our employees.					
4.	If it is the case, indicate the reasons why knowledge management has not been implemented.					
5.	Context and Culture					
	a. The clients play a major role in our company.					
	b. Our institution must renovate to be successful.					
	c. In our institution, processes should be continuously modified.					
	d. In our institution, knowledge should be updated.					

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	e.	We continuously modify our organization (structure, roles and positions).					
	f.	We identify and adopt the best practices.					
	g.	Feedback from our clients is always perceived positively and considered while making decision.					
6.	Information Technology						
	a.	ITs are very important in our daily activities.					
	b.	ITs are and were acquired with a clear vision of our organization's requirements.					
	c.	Our employees receive specific training in the usage of IT.					
	d.	Our employees have access to IT from their workplace.					
	e.	IT is used in management, administration and accounting.					
	f.	IT is used to access knowledge through the internet, e-mail or database.					