

# Knowledge Management Concepts of Public Secondary School Administrators in Peripheral Masbate, Philippines

**Arlene Barredo-Carmen**

Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology (DEBESMSCAT), Cabitan, Mandaon, Masbate, Philippines  
carmen.arlene@yahoo.com

**Asia Pacific Journal of Multidisciplinary Research**  
Vol. 6 No.4, 67-73  
November 2018  
P-ISSN 2350-7756  
E-ISSN 2350-8442  
www.apjmr.com  
CHED Recognized Journal  
ASEAN Citation Index

*Date Received: March 11, 2018 ; Date Revised: August 20, 2018*

**Abstract** – *Knowledge Management is something of a fad in modern business press and it addresses key issues that can lead to success within organizations. It addresses how organizations are able to manage the knowledge embedded in its systems and contained in the heads of its employees. Yet knowledge management is not bound to businesses only. Even the education sector sees the necessity of opening up and embracing this new trend. Petrides and Nodine [1] highlighted the use of knowledge management in education to enable encouragement of greater intelligence, practical know-how, and effectiveness of education institution. Applying the context of Public Secondary School Administrators in Peripheral Masbate, Philippines, this descriptive research assessed the knowledge management concepts of public secondary school administrators focusing on knowledge creation, retention, transfer, and utilization along familiarity, extent of experience, extent of influence of the factors affecting knowledge management practices, and the aspects of school management that benefit from proper knowledge management. The study yields significant findings: (1) Public secondary school administrators are moderately familiar and moderately experienced in knowledge management; (2) Dominant factors that influence the school administrators' knowledge management practices are vital and must be taken into consideration; and (3) Options for knowledge management advancements are imperative.*

**Keywords** – *Knowledge Management, Masbate, public secondary school administrators, peripheral*

## INTRODUCTION

Knowledge Management (KM) is not only something of a fad now but already a necessity in education [1]. With the government's call for educational upgrading and accountability, the demands for more information for teachers and administrators are expected to overload [1]. For instance, teachers and administrators need to remain "abreast of wide changing standards, curricula, and pedagogical methods" [1] while trying to adapt to external demands of national and international assessments amid struggles in producing the required documents from the existing systems of information. In light of these demands, KM may be applied.

Petrides and Nodine [1] describe KM as "a set of practices that helps to improve the use and sharing of data and information in decision-making". In agreement, Quiamco in Tuquero [2] believes that managing knowledge is making it work for an organization. For Davenport and Prusak as cited by Tuquero [2], it is the

process of knowing and understanding what you already know and not yet known to you and what to do with it. In other words, KM helps people understand how to effectively collect, disseminate, and share information to achieve effective decision-making and action for the organization [1].

In the Philippines, with the introduction of K-12 education, teachers and administrators encounter similar loads of demands which turn into challenges. High costs of commodity and limited schools' budget hinder staff and teachers' professional development. However, the more apparent problems in relation to knowledge management involve difficulty in preparation and publication of statistical bulletin, lack of coordination resulting in conflicting statistics and lack of organized units to handle the data collection, processing, and analysis [3]. In order to circumvent such concerns and be able to offer pragmatic solutions, specifically on

Knowledge Creation, Retention, Transfer, and Utilization, this study is conducted.

This study generally assessed the KM concepts of public secondary school administrators in Masbate. It sought answers to the following questions: 1) What are the levels of KM familiarity and extent of experience of public secondary school administrators in Masbate along: a) Knowledge Creation (KC), Knowledge Retention (KR), Knowledge Transfer (KT), and Knowledge Utilization (KU)? 2) What is the extent of influence of the factors affecting the KM practices as observed by the respondents? 3) What are the aspects of school management which benefit from proper KM as observed by the respondents, and 4) What plan of action can be proposed to enhance the KM concepts of the respondents?

This study is highly significant for school administrators as measures in preparing their respective schools KM-ready. Similarly, this will be beneficial to teachers in developing their KM skills vital to effective and efficient dealing with teaching-learning issues such as culture of evidence, demonstrating improvement in learning, and meeting students' expectations as well as to policy-makers in putting up a viable KM program that would suit the needs of Filipino people. Lastly, this will be helpful for future KM research directions.

### OBJECTIVES OF THE STUDY

The study aims to achieve the following objectives: to ascertain the levels of KM familiarity and extent of experience of public secondary school administrators in Masbate along: a) KC, b) KR, c) KT, and d) KU; to identify the extent of influence of the factors affecting the KM practices as observed by public secondary school administrators; to enumerate the aspects of school management which benefit from proper KM as observed by the public secondary school administrators, and to identify a plan of action that can be proposed to enhance the KM concepts of the respondents.

### MATERIALS AND METHODS

#### Research Design

This descriptive survey research assessed the KM concepts of public secondary school administrators in Masbate focused on knowledge creation, retention, transfer, and utilization. According to the Dictionary of Education, "this method presents factors and conditions of a group of persons, events or class and may involve the procedure of instruction, analysis, classification, enumeration, or measurement [4].

### Research Respondents

There were ninety-two (92) identified respondents composed of the public secondary school administrators in the division of Masbate. Out of them, seventy-four (74) have actually responded or an equivalent of 80 percent retrieval. Twenty-one (21) administrator-respondents were from the 1<sup>st</sup> Congressional District which include Batuan, Claveria, Monreal, San Fernando, San Jacinto, and San Pascual which is 28 percent of the total respondents. Thirty (30) administrators were from the 2<sup>nd</sup> Congressional District composed of Aroroy, Baleno, Balud, Mandaon, Milagros, and Mobo with 41 percent of the total number of respondents. Lastly, twenty-three (23) administrator-respondents were from the 3<sup>rd</sup> Congressional District composed of Cataingan, Cawayan, Dimasalang, Esperanza, Palanas, Pio V. Corpus, Placer, and Uson with 31 percent of the total number of respondents.

**Table 1. Respondents of the Study**

Congressional District	Administrators	Percentage
1st Congressional District	21	28
2nd Congressional District	30	41
3rd Congressional District	23	31
TOTAL	74	100%

**Table 2. Number of Years Working as Administrators**

No. of Years	Percentage
1-5	35.19
6-10	31.48
11-15	20.37
16-20	11.11
21-25	1.85
TOTAL	100%

To find out the extent of knowledge of the respondents on KM, the demographic characteristics were taken into account. These were the number of years and the seminars/trainings attended related to KM.

Among the 74 total public secondary school administrator-respondents, 73% specified their number of years working as administrators while others stayed "neutral" which means that respondents probably did not want to divulge their length of stay in the position.

The data presented the largest proportion, 36%, of public secondary school administrators presently hold their position as administrators ranging within 1 to 5 years; 31% of public secondary administrators presently

hold their position within 6 to 10 years; 20% of public secondary school administrators presently hold their position within 11 to 15 years; 11% public secondary school administrators presently hold their position within 16 to 20 years; and 2% of public secondary school administrators presently hold his/her position within 21 to 25 years.

The findings show that most of the respondents are newly-designated administrators while only few of the respondents have stayed for quite long years in their positions. This implies that since many of the administrator-respondents are new, they are still in the process of learning from the developed and accumulated knowledge which they use as a weapon to effectively and efficiently manage their respective schools while others were noted to already have experiences related to school management. The other respondent who was distinguished with a very long stay in the position seemed to be very equipped and experienced in handling his/her schools and teachers yet, probably with limited time to offer his/her service to the institution due to near retirement.

There were various seminars/trainings attended by the public secondary school administrators related to KM. These were Basic, Advance, and Regional School-Based Management Seminar; and Learning Management Plan Seminar. Other seminars attended were the International Seminar on Executive Management Education for All School Managers; Concepts of Critical Thinking in Management Seminar; Regional Forum on School Improvement Issues; and Training of Heads on the Enhanced Basic Education Information System but based on the result of this study, the administrators still seek to attend seminars/workshops focusing on KM.

### Research Instrument

To achieve its objectives, the study made use of a questionnaire-checklist. This included a modified version of the questionnaires of Syed –Ikhsan and Rowland in Tuquero [2], Tuquero [2] and KM Research

5	Highly Familiar	4.3-5.0
4	Moderately Familiar	3.4-4.2
3	Uncertain	2.6-3.3
2	Fairly Familiar	1.8-2.5
1	Unfamiliar	1.0-1.7

Questionnaire [5].

### Data Collection Procedures

The assessment of KM concepts of public secondary school administrators started with a formal letter addressed to the Schools Division Superintendent, Dr.

Gilbert T. Sadsad, to formally inform him of the conduct of the study.

### Validity and Reliability Testing

Before the final distribution of the questionnaire, it was submitted to the adviser for comments and then subjected for a ‘validity test’. The questionnaire passed through a panel of judges. Corrections were taken and incorporated into the final questionnaire.

### Sampling Method

The researcher directly inquired from the DepEd Division Office for the 100% target population and the official list of names and schools. The study was a complete enumeration of public secondary school administrators in Masbate. Valid turnover was 74 out of 92 respondents or 80%.

### Data Gathering

The final copy of the questionnaire was reproduced and distributed to the respondents during their scheduled Division Management Committee (MANCOMM) meeting.

### Retrieval of the Questionnaires

Out of ninety-two (92) projected respondents, only seventy four (74) public secondary school administrators or 80 percent answered the questionnaires. The retrieval of the questionnaires was done right after the MANCOMM meeting. Others who were absent during the said meeting were sent copies of questionnaires but not all respondents returned the said questionnaires. Upon the retrieval, the responses were tabulated, recorded, and computed. The data were interpreted to come up with the conclusions and recommendations.

### Statistical Tools

The data gathered were treated using the frequency distribution, percentage and rank order, and weighted mean.

The Likert Scale was utilized in the following parts: Part I-Level of KM familiarity of public secondary schools’ administrators in Masbate along Knowledge Creation, Retention, Transfer, and Utilization.

Part II-Extent of experience of the public secondary school administrators in Masbate in their school-based KM as to Knowledge Creation, Retention, Transfer, and Utilization

Part III-Extent of influence of the factors affecting KM practices as observed by the respondents.

**RESULTS AND DISCUSSION**

Findings show that the public secondary school administrators were moderately familiar about Knowledge Management.

**Table 3. Level of Familiarity**

<b>KM Areas</b>	<b>WM</b>	<b>VI</b>
KC (entry of new knowledge, knowledge development, discovery, and capture)	3.61	MF
KR (preserve knowledge and allow it to remain in the system once introduced)	3.67	MF
KT (communication, translation, conversion, filtering, and rendering)	3.85	MF
KU (includes activities and events connected with the application of knowledge to business processes)	3.58	MF
<b>Composite Mean</b>	<b>3.68</b>	<b>MF</b>

*MF- Moderately Familiar*

Results of the study show that the administrators are informed about KM and they have been exercising it in their daily school operations. However, Dr. Talisayon as cited in Tuquero [2] affirms KM is new to the Philippines. As a proof, there is relatively little information gathered to prove its existence. This is supported with Tuquero’s [2] conclusions that colleges of agriculture of selected universities in the super regions of the country comparably face the challenges in developing better KM practices. There is the absence of organized group to aid inquiries on the basics of KM [2]. Syed-Ikshan and Rowland in Tuquero [2] agree that there is also an absence of specific KM strategy though knowledge is embedded in the organizations’ policies, files, and data bases.

**Table 4. Extent of Experience along KC Practices**

<b>KM Areas</b>	<b>WM</b>	<b>VI</b>
Enables and Encourages Knowledge Sharing	3.58	ME
Creates a Suitable Work Environment	3.61	ME
Provides Systems that Support the Work Process	3.49	ME
Provides Knowledge Workers with Timely, Relevant Information, and Data	3.56	ME
<b>TOTAL</b>	<b>3.57</b>	<b>ME</b>

*ME – Moderately Experienced; WM – Weighted Mean; VI- Verbal Interpretation*

Davenport and Prusak in Tuquero [2] assert that knowledge develops and accumulates over time through what we have done or what we have experienced in the past. Meanwhile, the extent of experience of public secondary school administrators in Masbate in their

school-based KM was assessed to be “Moderately Experienced” with an average weighted mean of 3.62 along the four areas: KC Practices, KR Practices, KT Practices, and KU Practices. This is shown in Table 4 below.

The data imply that the public secondary school administrators are applying some of these KC management practices into their daily school tasks but not absolutely to the extent of undertaking them consistently. These administrators must look into the creation of knowledge through practice, collaboration interaction, and experimentation as various knowledge types are shared and converted.

Based from the data, the administrators were found to be moderately experienced in all mentioned KR management practices. These data imply that the administrators have been pulling off activities that preserve knowledge and allowing this to remain school’s possession and being taken care of by its staff. It looks like administrators are comfortable in retaining knowledge. This is supported by Dunn, Deckinger, Withers, and Katzenstein [6] who mentioned about the individualized approaches of retention as ‘easy to implement’.

**Table 5. Extent of Experience along KR Practices**

<b>KM Areas</b>	<b>WM</b>	<b>VI</b>
Bi-directional Knowledge Flow	3.53	ME
Convenient KR Mechanisms	3.51	ME
Recognition and Reward Structure	3.69	ME
The Golden Gem (bringing back retirees in KR roles)	2.97	ME
Assessing the Risk of Losing Critical Knowledge and Skills	3.10	ME
Determining an Approach to Capture Critical Knowledge	3.20	ME
Implementing and Evaluating Actions for Managing this Risk (documentation, mentoring, training, reengineering, sharing expertise)	3.85	ME
<b>Average Weighted Mean</b>	<b>3.41</b>	<b>ME</b>

*ME – Moderately Experienced; WM – Weighted Mean; VI- Verbal Interpretation*

On the other hand, retention may serve as a critical problem for many higher education institutions. The January 2009 Institute for Corporate Productivity Report concurred that few organizations seem to have a formal retention strategy or even a KR Standard Operating Procedure (SOP). Probably, the administrators are employing strategies to retain the knowledge but sometimes, due to loads of responsibilities in school, they sometimes fall short in maintaining the viability of

the knowledge that come across their command. Among the listed KR practices, ‘Bringing back retirees creatively in KR roles’ was found out to be the least thing the administrators do, however, recently, the DepEd gives chances to retired educators who would like to be re-assigned to teach.

The data proved an interpretation of ‘moderately experienced’ for all the KT Management practices. The most ideal includes ‘motivates the people to share’. The data imply that the public secondary administrators in Masbate are employing activities associated with the transfer of knowledge from one party to another. Examples may be the conduct of echo-seminar activities or group meetings every time their teachers arrive from a division or regional colloquium. However, this result deviates from the ideas of Argote and Ingram, as noted by Al-hawari, [7] on the transfer of organizational knowledge, such as best practices, to be quite difficult to achieve. Liebowitz and Chen as cited by Tuquero [2] argued that the reason why people hesitate to share knowledge is because they retain the information glued in them up until their promotions.

**Table 6. Extent of Experience along KT Practices**

KM Areas	WM	VI
Ensures receipt of knowledge critical to close gaps	3.75	ME
Ensures understanding and utilization of critical knowledge	3.76	ME
Involves interventions and decisions for knowledge use	3.67	ME
Gets the Word out with the Assumption on the use of good ideas	3.61	ME
<b>Total</b>	<b>3.70</b>	<b>ME</b>
<b>Composite Mean</b>	<b>3.62</b>	<b>ME</b>

*ME – Moderately Experienced*

The data imply on table 7 that the public secondary school administrators in Masbate are carrying out activities and events connected with the application of knowledge learned from school gatherings, results of research, conferences, summits, or conventions or direct instructions from their supervisors and superintendent. The administrators in Masbate will be able to understand more and utilize knowledge if they will follow Knott/Wildawsky in Tuquero [2] to have reception (ensuring that those in the organization receive (through transfer, creation or diffusion) knowledge critical to close knowledge gaps) and cognition (ensuring that those in the organization are able to understand and utilize the knowledge) for every learned knowledge.

**Table 7. Extent of Experience along KU Practices**

KM Areas	WM	VI
Identifies the Knowledge Holders Within the Organization	3.86	ME
Motivates the People to Share	4.13	ME
Designs a Sharing Mechanism to Facilitate the Transfer	3.83	ME
Executes the Transfer Plan		ME
Measures to Ensure the Transfer	3.69	ME
Applies the KT	3.67	ME
Undertakes Mentorship, Guided Experience, Simulation, Guided Experimentation, Work Shadowing, Paired Work, Community of Practice, Narrative Transfer	3.55	ME
<b>Average Weighted Mean</b>	<b>3.79</b>	<b>ME</b>

*ME – Moderately Experienced; WM – Weighted Mean; VI- Verbal Interpretation*

**Table 8. Extent of Influence**

Indicators	WM	VI
Local Knowledge Culture	3.72	MI
Organizations Structure	3.71	MI
Organizations Technologies	3.71	MI
Organizations Behavior	3.93	MI
Organizations Budget	3.78	MI
Human Resources	4.08	MI
<b>Composite Mean</b>	<b>3.82</b>	<b>MI</b>

Among the factors, “Human Resources” preceded to have the highest weighted mean which shows that the administrators believed that manpower, including the people working towards the attainment of the vision, mission, and objectives of respective organizations, significantly influences the knowledge management practices. This is reinforced by the idea of Davenport in Tuquero [2] that humans virtually do all the work of transforming information into knowledge through the 4Cs namely: comparison, consequences, connections, and conversations. This strengthens the importance of human machinery in a certain organization or entity. Just like what Petrides and Nodine [1] assert that “the people, not systems, manage knowledge” (p. 1). Next factor that influences knowledge management practices according to the administrators is the “Organizations Behavior” with a weighted mean of 3.93. This reflected the beliefs that the manners, attitude, conduct, actions or deeds of individuals are influential in the performance of their tasks for the organization. This data confirmed the idea of Nigel Holden [8] in his overall recommendations

which pertain to the behavior that includes the need to build participative competence in knowledge workers, create appropriate cross-cultural interfaces like facilitators, local managers, corporate universities, encourage networking, create common cognitive ground (via appropriate culture-sensitive translations), overcome ethnocentrism, transfer knowledge in such a manner as to overcome ambiguity, interference (with prior perceptions), and equivalence (with respect to prior concepts). Also, this affirmed the researcher's belief that behavior is greatly significant towards the success of any organization.

**Table 9. Aspects of School Management Which benefit from Proper KM**

School Management Aspects	Percentage	Rank
Research	18.10	4
Curriculum Development	23.05	1.5
Student and Alumni Services	15.64	5
Administrative Services	20.16	3
Strategy Planning	23.05	1.5
Total	100%	

The data imply that the public secondary school administrators believed that among the five listed school management aspects, curriculum development and strategic planning would benefit mostly from proper KM. These ratings of the administrators corroborated with the findings of Thitithanon and Klaewthanong [9] stating the multitude of benefits of KM applications to academic institutions. Kidwell, Vander Linde, and Johnson [10] as cited by Tuquero [2] agreed and demonstrated that the benefits of the use of KM method in higher education can be classified into research processes (encourages the competitiveness condition and responsiveness for exciting research grants, contract and commercial), the curriculum development processes (enhances the quality of curriculums and programs, efforts, in faculty development, and quality of administrative services), student and alumni services (improve all student services such as library, academic measurement, general information, and information technology support services within the main campus and minor campuses), administrative services (focusing on the administrative services, efforts of development, administrative decentralization, administrative policies), and strategic planning (strategy planning decentralization, sharing internal and external

information, market-focus strategy plans, and sharing knowledge from a variety of resources).

**Table 10. Proposed Plan of Action to enhance the KM concepts of the respondents**

GOAL	IMPORTANCE OF THIS GOAL	BEHAVIOR CHANGE	SMART: Specific, Measurable, Action-Oriented, Reliable, and Time-Sensitive
Sponsor a Seminar-Workshop on Knowledge Management Practices in the Province of Masbate for Public Secondary Schools Administrators	This will not only make them aware of the KM practices to be executed in their respective schools but will experience the actual application of the KM practices because of the 'workshop feature' of the activity	The KM perspective may be integrated into the systems and will become a 'habit' in managing knowledge	A two-day Seminar-Workshop on Knowledge Management Practices for Public secondary Schools Administrators to be scheduled during summer
Create a Knowledge Management Manual for Public Secondary Schools Administrators	This will serve as their guide in implementing KM practices in their respective schools	A positive attitude towards knowledge gain could be developed as they will learn how to handle information/knowledge overload	A 50-page, softbound KM manual will be printed, depending on the availability of fund

**CONCLUSION AND RECOMMENDATION**

The results of the study suggest that the KM concepts of public secondary school administrators are particularly promising and may be considered as a suitable kick off, specifically along knowledge creation, retention, transfer, and utilization. However, the results also call for strengthening of the extent of familiarity and experience, perhaps moving one or two notches up of the scale or showing tangible proofs of accomplished KM practices in order to achieve the main goal of knowledge management which is to improve decision-making of teachers and administrators through the employment of information management strategies.

Being familiar and experienced with knowledge management will not yet illustrate a sweeping reception for KM or bring about total change in each school of

these public secondary administrators. Rather, this will serve as a set of practices and values that will induce members of the organization, irrespective of level, as how Petrides and Nodine [1] describe the sharing of information – “to contribute, to participate, to interact, to grow, and to learn while mastering higher order skill sets” (p. 25) and make sense of information essential to success of people or organization.

Furthermore, since curriculum development and strategic planning are the aspects that would benefit most from KM, as perceived by the administrators, the convergence of practice and theory implementing the KM practices must commence instantaneously and rigorously to assess the impact of KM practices when applied in their educational contexts. The implementation can start with the activities recommended in the plan of action to enhance the KM concepts of the participants and their colleagues.

Finally, it is recommended to conduct a follow-up study focusing on the actual implementation and validation of these KM practices to facilitate the evaluation of the extent of effectiveness of KM practices as applied into the specific contexts of the respondents.

#### REFERENCES

- [1] Petrides, L. A., & Nodine, T. R. (2003). Knowledge management in education: defining the landscape. [www.iskme.org/publications/km-education-defining-landscape-0](http://www.iskme.org/publications/km-education-defining-landscape-0). June 29, 2011.
- [2] Tuquero, F. L. (2009). “Assessment of Knowledge Management of Agriculture Colleges in Selected Universities in the Super regions of the Philippines”, (Unpublished Dissertation, UPLB).
- [3] Department of Education (2011). Retrieved from <http://www.deped.gov.ph>. July 29, 2011.
- [4] Good, Carter V. (1959). *Dictionary of Education*. New York: McGraw – Hill Book Company.
- [5] Knowledge Management Questionnaire. [http://learn.uvm.edu/survey/kmci/kmci\\_survey7.htm](http://learn.uvm.edu/survey/kmci/kmci_survey7.htm). July 29, 2011.
- [6] Dunn, R., Deckinger, L., Withers, P., & Katzenstein, H. (1990). Should college students be taught how to do homework? *Illinois Research and Development Journal*, 26(2), 96-113.
- [7] Al-Hawari, Maen (2007). The Importance of the Four Knowledge Management Styles to Industry: Using the HSD Post Hoc Test. Retrieved <http://www.tlinc.com/articl141.htm>. July 29, 2011
- [8] Holden, Nigel (2002). Cross-Cultural Management: A knowledge Management Perspective. <http://www.techsparks.com/Cross-cultural-management-a-knowledge-management-perspective.html>. June 29, 2011
- [9] Thitithanon, Prayong and Taspong Klaewthanong (2007). Knowledge Management is a Perfect Education Development Tool: Is Thailand’s Higher Education Really Ready to Embrace It. *Journal of Knowledge Management Practice*, 8, (2). <http://www.tlinc.com/articl135.htm>. July 29, 2011.
- [10] Kidwell, J.J., Vander Linde, K. M., and Johnson, S. L. (2000). “Applying Corporate Knowledge Management Practices in Higher Education. *EDUCAUSE Quarterly*, (4), 28-33. <http://www.destinationcrm.com>. July 30, 2011.

#### COPYRIGHTS

Copyright of this article is retained by the author/s, with first publication rights granted to APJMR. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4>).