

Level of Knowledge Management among Faculty Members in the Context of Nepali Higher Educational Institution

Krishna Prasad Paudel

Abstract

Knowledge management is taken as an integral component of any institution to enhance organizational effectiveness and productivity. Knowledge Management (KM) in academia is being prioritized these days to enhance academic activities and discourses. The knowledge management impacts to enhance the academic activities in academia, particularly for higher educational institutions (HEIs). Furthermore, the practices of KM enhance academic activities in higher educational institutions. Thus, the purpose of this research was to measure the level of KM among faculty members of HEIs. The quantitative method was used to conduct this research. The tools to measure knowledge management practices among faculty members of HEIs were developed by using Delphi methods. The 445 respondents were taken from the four universities of Nepal. Similarly, the data was taken from these universities as well. The factor analysis was used to identify the dimension of KM. The factor analysis identified seven dimensions of KM; knowledge utilization, acquisition, generation, dissemination, transfer, creation, and presentation. To analyze the level of the knowledge management, mean and standard deviation were used as the indicators or analysis tools for this research. The level of knowledge management was categorized into three groups viz. low, medium, and high. The study found that the overall pace of KM was high except for the knowledge generation process in the context of higher education. Due to individual differences and the organizational environment, culture, and technological infrastructure, it makes the level of knowledge generation differences comparing from other dimensions of knowledge management.

Keyword: factor, faculty members, higher educational institutions, knowledge management

Introduction

Knowledge Management (KM) is considered as emerging concepts in the field of business, engineering, health, and education these days. With the advancement of technology and access to information and communication technology, the way of conducting academic activities within academic institutions is vastly changing. Modern technology is helping to carry out different types of academic discourses such as integration of technology in the classroom, referring to the latest research in real-life problems, accessing e-resources to learn about the latest change in academic attainment by the faculty members in academia. The human mind can gather, generate, create disseminate, and utilize knowledge through reflection and interpretation that are available within the institution. In the line of Davenport (1997, p. 9) data are “observations of states of the word, which can be easily structured, captured on the machine and later on can be transferred easily”. Hence, the knowledge belongs to an individual’s mind and it is contextual too. Knowledge management is the process of managing the knowledge of individuals and institutions to enhance organizational productivity and efficiency. In this regard, Nonaka and Takeuchi (1995) explain knowledge management as the process of conversion of tacit knowledge into explicit knowledge and sharing it within organizations.

Knowledge management practices play a vital role in

promoting teaching and learning at various levels of academic institutions. Higher Education Institutions (HEIs) ensure that knowledge is shared among lecturers, researchers and students and advocate the knowledge that falls within the realm of knowledge management (Bimol, Saikia, Sashikumar, Pushparani, 2017). KM provides a systematic process to help in the creation, transfer, and application of knowledge across the higher educational institutions. KM activities may help HEIs to develop and update the modern educational content, enhance and leverage the effectiveness of scientific research, and its innovation among the faculty members and students (Kalkan, 2017). Hence, the level of the faculty member in knowledge management practices enhances their academic activities within higher educational institutions.

Knowledge Management

The knowledge belongs to individuals’ minds and is based on unique conditions and contextualized situations. According to Girard and Girard (2015), knowledge resides in the heads of people and it influences organizational success. Thereupon, knowledge refers to information stored in the human mind and is used to solving the problems. The epistemological dimension describes two types of knowledge tacit and explicit. The epistemological dimension of knowledge is concerned with the conversion from tacit to explicit and vice-versa and the ontological dimension of



knowledge is transformed from individuals to organization (Nonaka, 1994) to enhance organizational efficiency and productivity. In this regard, knowledge management is the process of conversion tacit knowledge into explicit one. Johannessen (2008) adds tacit knowledge as the personal, informal experience of individuals, whereas meta-knowledge and explicit knowledge are generated through the formal education system. According to Nonaka and Kanno (1998), explicit knowledge can be expressed in words and numbers, and later on can be shared in the form of data, formula, specifications, and manuals. In the meantime, this type of knowledge can be transferred among individuals.

The tacit knowledge is invisible information stored in our mind or feeling, whereas explicit knowledge is documented and that can be visible (Filemon & Urairte, 2008). Explicit knowledge is codified and converted into another form and later stored in documents, databases, websites, and emails, and so on. Based on the context and situation, either we follow technology-focused KM or process-focused KM to convert tacit knowledge into the explicit one. Knowledge management needs to study the three elements like people, process and technology (Edwards, 2011). The people or users from different institutions use some types of technological tools either to generate or transfer or to solve any problems. According to Mao, Liu and Zhang (2015), people implement organizational changes to enable knowledge sharing culture. Literature has revealed that knowledge management is composed of 80% of people and 20% of technology (Girard & Girard, 2015). Thus, the people must be motivated to share what they know. People with high technical skills are very innovative and are needed in most organizations (Bassi, 1998). In the same line, Bassi (1998) defines the knowledge management as the process of creating, capturing, and using knowledge to enhance organizational performance, while Parlbay (1997) defines it as the discipline of capturing knowledge-based competencies, storing and disseminating them for the benefit of the organization as a whole. He also highlighted that knowledge management captures knowledge-based competencies, storing, and disseminating knowledge for the benefit of the organization.

KM has been broadly applied not only for the business sector but also for the higher education arena. The goal of KM in academic institutions also relates to the management of knowledge to achieve an institution's advantages (Cokus-Semmel, 2002; Mohayidin, Azirawani, Kamaruddin, & Margono, 2007; Yusoff, Mahmood, & Jaafar, 2012). These advantages cover the achievement of higher education missions (teaching, conducting research, and community servicing) and improvement of organization management (developing strategic plans and improving decision-making processes). Highlighting the function of knowledge management, Dalkir (2005) mentions that it is the ongoing process of creating and sharing knowledge. In other words, knowledge management is a continuous process of generating and sharing knowledge to achieve the goal of an organization. The review of the existing KM literature in higher education suggests that various KM definitions can be categorized into three distinct perspectives: economic, cognitive, and information management (Lee, 2007; McCarthy, 2006; Wiig, 1993). Each perspective

leads to the underlying assumptions of knowledge management to enhance the knowledge of individual.

Methodology

Quantitative methods were used to conduct this research. The population of this study primarily comprises all the faculty members (professors, associate professors/readers, and assistant professors/lecturers) employed to four different universities; namely Tribhuvan University, Kathmandu University, Purbanchal University, and the Pokhara University of Nepal. Four departments, i.e., Humanities, Education, Management, and Science were taken to collect the data. The self-developed survey tools by the Delphi method were used to collect the data. The Delphi method is a popular process to achieve consensus on the important issues or complex social problems with the help of subject experts and practitioners in a particular field (Linstone & Turoff, 2002). The Delphi process carried out the local knowledge, norms, and values on the social context (Paudel, 2019). The Delphi process generally includes in-depth interviews with practitioners in the field (grounded), written interview, open-ended questions, and panel discussion with experts. The identified indicators from the grounded data including experts' views and insights received from panel discussion were compared with literature and categorized into different dimensions of knowledge management. Delphi; 36 items were categorized under the three dimensions of knowledge management (knowledge acquisition, knowledge dissemination, and knowledge application/utilization).

The researcher developed 7-point Likert scales from the indicators identified from the field (grounded) expert interviews and literature to measure the knowledge management practices. Croasmun and Ostrom (2011) argue that high scale points increase the reliability; on that account, the researcher followed the 7-point scale to develop a questionnaire for this study. The reliability and validity of the tools were tested before the data was collected. Many statistical tools are available to measure the reliability and internal consistency of the data. Among them, the split-half method and alpha coefficient of consistency is mostly used (Best & Kahn, 2006). I used Cronbach's alpha coefficient in my study to check the consistency of the instrument. "For an instrument to be used, its internal reliability coefficient Cronbach's alpha(α) must be at least 0.7" (Santos, 1999) since all of the dimensions of knowledge management have a value greater than 0.7 and satisfy this condition. Creswell (2008) explained validity refers to whether the questionnaire measures what it intends to measure or not. Among many types of validity, construct, content, and criterion validity are three principal validities that need to be considered at the very outset in the quantitative research (Cohen et al., 2018). Construct, content, and criterion validity are evaluated during the whole process of research (Babbie, 2001; Huck, 2012). Construct, content, and criterion validity were evaluated during the whole process of research (Babbie, 2001; Huck, 2012).

The data was collected from 445 faculty members of higher educational institutions of Nepal. The data was collected through stratified sampling methods. Initially, the

data was coded in SPSS version 25. The factor analysis was used to identify the dimensions of knowledge management. The factor analysis was executed to explore the dimensions of knowledge management and academic performance. Factor analysis is a multivariate statistical technique (Rummel, 1967; Shenoy & Madan, 1994), which is used to determine a large number of variables in terms of relatively few hypothetical variables called factors. The factor analysis loaded 26 items of knowledge management under seven dimensions. For identifying the level of knowledge management, I have categorized the mean score by using the formula of Best's (1977, as cited in Shabbir et al., 2014) criteria as follows:

$$\frac{\text{Highestscore} - \text{Lowestscore}}{\text{NumberofLevels}} = \frac{7 - 1}{3} = \frac{6}{3} = 2$$

The levels are categorized as high, medium, and low. These levels were calculated mainly based on the faculty members' mean score of 1 – 2.99, 3 – 4.99 and 5 – 7 as; low, medium, and high respectively.

Exploring the Factors of Knowledge Management

Factor analysis is a multivariate statistical technique, which is used for the resolution of a set of a large number of variables in terms of relatively few hypothetical variables, called factors (Rummel, 1967; Shenoy & Madan, 1994). Such analysis is also used to find ways of condensing that information which is contained in several original values into only a few dimensions. Factor analysis attempts to explain the correlations among the variables by yielding only a small number of underlying factors, which contain all the essential information about the linear interrelationships among the variables concerned. According to Shenoy and Madan (1994), factor analysis results serve three main purposes: (1) to identify the underlying, or latent, factors which determine the relationship between observed variables; (2) to clarify the relationship between the variables; and (3) to provide a classification scheme, in terms of the data that scores on various rating scales are grouped. The factors loaded by factor analysis are presented in table 1.

After identifying the factors, it was named as a dimension of knowledge based on the key items/variables loaded in each factor.

Faculty Members' Level of Knowledge Management

The factor analysis was used to identify the predictors of knowledge management and academic performance. This study explored seven predictors of knowledge management namely knowledge utilization, acquisition, generation, dissemination, transfer, creation, and presentation in the context of higher education institutions (HEIs) of Nepal. To explore the level of knowledge management it was determined through the dimensions of knowledge management. Primarily the analysis was based on the frequencies, percentage, mean and Standard Deviation (SD). The expression of the collected data is presented in Table 2. The data indicates that the faculty members of higher educational institutions have a high and medium level of knowledge management practices among all its components. The faculty members of higher educational institutions expose the high KM (Mean = 5.46, SD = 0.56) among them. Among these seven dimensions of KM, knowledge

utilization consists of the highest mean score (5.78) which refers to high KM.

SD = Standard Deviation, KM = Knowledge Management

The high level of knowledge utilization reflects that the faculty members of higher educational institutions (HEIs) are applying their knowledge for the betterment of academic excellence. It also shows that the pace of the knowledge generation process of faculty members of higher educational institutions is at a medium level. The rest of the knowledge management processes; i.e., knowledge utilization, acquisition, dissemination, transfer, creation, and presentation in the level of high that makes the level of KM of the faculty member is at a high level. Table 2 explains the frequencies of KM level among faculty members of higher educational institutions of Nepal. The KM is the sum of the mean score of seven dimensions of knowledge management (utilization, acquisition, generation, dissemination, transfer, creation, and presentation) in this study. The majority of the respondents had high KM in all dimensions except knowledge generation. Overall, the majority of faculty members (N = 295, % = 71.8) belong to high KM. The number and percentage of the respondent to each dimension are presented to Table 3.

In the context of knowledge presentation, respondents (N = 157, % = 35.3) consist of medium pace of KM. The very few faculty members gave their responses as they have included low KM concerning the entire components of knowledge management. The data presented in Table 2 further showed that knowledge utilization had more than 80% pace on a high level of KM and 17% pace on the medium level. Likewise, for knowledge acquisition and creation more than 70% of pace on high level and knowledge dissemination, transfer, and presentation greater than 60 % pace on the high level of knowledge management. The knowledge utilization and acquisition had the level of KM near about 20% pace on the medium level. In the same way, knowledge dissemination, transfer, and creation had less than 30 % of medium pace on knowledge management. In aggression, for knowledge management, none of the faculty members belong to the low level.

Finding and Discussion

The study found the pace of knowledge management practices high in all of the dimensions of knowledge management practices except the knowledge generation behavior of faculty members in the context of higher education institutions. Based on the three types of level of knowledge management practices namely; low, medium, and high. The high level of knowledge utilization reflects that the faculty members of higher education institutions are applying their knowledge for the betterment of academic excellence. Research conducted by Dei (2017) found that there is a high level of knowledge management processes at the Ghanaian universities mainly in Ghana Technology University College, University of Professional Studies Accra, and University of Ghana. Since the level of knowledge management possesses high in the context of Nepali higher education institutions seems that the knowledge utilization process guided by the problem-solving capacity,

Table 1: Factors with Dimensions and Items of Knowledge Management

Dimension	Item Name	Factor Loading						
		1	2	3	4	5	6	7
Knowledge Utilization	Improve Efficiency	0.723						
	Conduct Research	0.718						
	Increase Thought	0.645						
	Daily Life Issues	0.595						
	Solving Problem	0.552						
Knowledge Generation	Interaction		0.724					
	Discussion		0.723					
	Modern Technology		0.671					
	Conducting Training		0.460					
Knowledge Acquisition	Individual Performance			0.734				
	Organizational Leadership			0.616				
	Professional Networks			0.606				
	Conference Participation			0.514				
Knowledge Dissemination	Knowledge by Teaching				0.697			
	Usage of Social Media				0.682			
	Institutional Research				0.580			
Knowledge Transfer	Usage of e-Portal					0.718		
	Learning Environment					0.715		
	Training Sessions					0.571		
Knowledge Creation	Mentoring new faculty						0.748	
	Joint Projects						0.563	
	Workshop/Conference						0.532	
	Purchase of e-Sources						0.411	

Source: Field survey, 2016

Table 2: Level of Knowledge Management

Dimensions	Mean	SD	Level of KM
Knowledge Utilization	5.78	0.73	High
Knowledge Acquisition	5.71	0.83	High
Knowledge Generation	4.83	1.06	Medium
Knowledge Dissemination	5.46	1.03	High
Knowledge Transfer	5.45	0.90	High
Knowledge Construction	5.51	0.74	High
Knowledge Presentation	5.48	0.69	High
Knowledge Management	5.46	0.56	High

Source: Field survey 2016

Table 3: Description of Knowledge Management Level

Dimensions	High		Medium		Low		Total	
	N	%	N	%	N	%	N	%
Knowledge Utilization	368	82.7	76	17.1	1	0.2	445	100
Knowledge Acquisition	348	78.2	89	20.0	8	1.8	445	100
Knowledge Generation	175	39.3	242	54.4	28	6.3	445	100
Knowledge Dissemination	308	69.2	121	27.2	16	3.6	445	100
Knowledge Transfer	301	67.6	133	29.9	11	2.5	445	100
Knowledge Creation	317	71.2	126	28.3	2	0.5	445	100
Knowledge Presentation	287	64.5	157	35.3	1	0.2	445	100

Source: Field survey, 2016

knowledge acquiring process guided by the accessing of technology, and engaged in the interaction and discussion process. For the knowledge generation process, it is guided by organizational leadership and professional networks. In the case of the knowledge dissemination process, it is indicated by the usage of social media, and research through institutions. Likewise, for the knowledge transfer process, it is guided and impacted by the usage of e-portals, participation in training sessions, and so on. For the knowledge creation process, it depends on the conduction of joint projects and workshops/seminars. The knowledge presentation process is guided by consultancy services and the development of simulators. According to Mao, Liu and Zhang (2015), people implement organizational culture to enable knowledge sharing habit in the institution. The behavior of faculty members is good and enhancing the capability of knowledge management practices high in educational institutions of Nepal.

The access to information technology, knowledge sharing culture, emerging trends of doing research activities within the organization, etc. Knowledge acquisition was found to be one of the knowledge management practices with a high mean score indicating that higher education institutions tend to focus on acquiring knowledge (Turyasingura, 2011). Obeidat, Masa'deh, and Ab-dallah (2014) establish that high levels of knowledge worker commitment are critical to knowledge creation. Patel and Patil (2016) emphasize that the provision of high-quality education and related services is the main engine of any institution to improve the excellence, competitiveness, importance, and popularity of any higher educational institution. For this Baptista-Nunes, Kanwal and Arif (2017) argue that the concerned authorities and personnel are aware of the importance of knowledge management in the higher educational, academic institutions. Hence, the knowledge in educational institutions is used to enhance the academic discourses to enhance the intellectual capital of individual and institutional level. The organizational culture, environment, technological infrastructure, and leadership to enhance the intellectual capital.

The commitment of the organization with knowledge management is high (Paez-Logreira, Zamora-Musa, & Velez-Zapata, 2016). The research found a high level of knowledge management practices behavior of faculty members in the context of Nepalese higher education institutions. This may be caused by the enforcement policies of

higher education: To produce competent human resources in the global context and the policy adopted by the National planning commission: make the higher education accessible, competitive, and researchable. In another way, the learning behavior of the faculty member is increasing by technological advancement in the era of the 21st century. Academic consulting and research services, conducting training sessions, conducting joints projects, usage of e-portals, participation in workshops, and seminars are enabling the thinking level of faculty members and increasing their practices of knowledge management behavior.

In this context, leadership determines the practices of knowledge management defining knowledge vision regarding the nature of knowledge sought and created (Al Saifi et al., 2016) in academic institutions. The knowledge creation process also takes place in e-learning and web-based environments (Samoila, Ursutiu & Jinga, 2014; Syed Mustapha, Sayed & Mohamad, 2017) and it impacts the knowledge management practices to enhance academic activities and discourses that further enhance the intellectual capital of individual and institution. Consequently, the efficiency of faculty members increases and a higher level of productivity is achieved (Laloux, 2014) through cognitive perspectives within institutions. Information management plays a vital role in enhancing the organizational database to store and disseminate the data and information of the institution.

Conclusion

The behavior of knowledge management practices of faculty members is varying from each other and it identified the different predictors of knowledge management in the context of Nepali higher educational institutions. The knowledge management practice behavior defines the level of knowledge management in academia. The knowledge management practices found by this research are considerably high among faculty members of higher educational institutions of Nepal. The knowledge utilization, acquisition, generation, dissemination, transfer, creation, and presentation process of the faculty member to their daily academic activities enhance their knowledge management practices as high. The learning behavior and network building and accessing attitude of faculty member varying them different from each other to enhance their capacity building processes to produce new knowledge in academia. This provides a clear picture of practices of knowledge management at higher educational institutions

for better practices of academic activities and discourses.

Acknowledgments:

I would like to thank to the University Grants Commission, Nepal (UGC, Nepal) for providing the grants to conduct my Doctoral research. I am very thankful to my research participants, the faculty members of higher educational institutions of Nepal, namely Tribhuvan University, Kathmandu University, Purbanchal University, and Pokhara University for the patience to fill in the questionnaire for this research.

Funding:

This article is a part of author's doctoral study, and University Grants Commission, Nepal (UGC, Nepal) grants funds for the research.

Ethical Approval:

Ethical approval embedded in the research proposal has been approved by the Research Committee at Kathmandu University.

Conflict of Interests:

There is no conflict of interests.

Ethical Conduct of Research:

I declare that this research has been conducted ethically, ensuring the confidentiality of the research participants and reflecting upon the positionality of the author as a researcher.

References

- Al Saifi, S., Dillon, S., & McQueen, R. (2016). The relationship between management Support and knowledge sharing: An exploratory study of manufacturing firms. *Knowledge and Process Management*, 23(2), 124–135.
- Babbie, E. R. (2001). *The practice of social research* (9th ed.). Belmont, CA: Wadsworth Thomson Learning.
- Baptista-Nunes, B. J. M., Kanwal, S., & Arif, M. (2017). *Knowledge Management Practices in Higher Education Institutions: A Systematic Literature Review*. Retrieved from <http://library.ifa.org/1716/1/230-nunes-en.pdf>
- Bassi, L. (1998). Harnessing the power of intellectual capital. *The Journal of Applied Manufacturing Systems*, 29-35.
- Best, J. W., & Kahn, J. V. (2006). *Research in education* (10th ed.). Pearson Education.
- Bimol, S., Saikia, M., Sashikumar, L., Pushparani, D. L. (2017). Cloud computing: A new generation of IT infrastructure for knowledge management. *International Journal of Engineering Trends and Technology (IJETT)*, 43(7): 388-392. <https://doi.org/10.14445/22315381/IJETT-V43P265>
- Cohen, L. Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Coukos-Semmel, E. D. (2002). *Knowledge management: Processes and strategies used in United States research universities*. (Doctoral dissertation). ProQuest Dissertations and Theses database (UMI No. 3041780). Retrieved from pareonline.net/pdf/v10n7.pdf
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson.
- Croasmun, J., & Ostrom, L. (2011). Using Likert-type scales in the social sciences. *Journal of Adult Education*, 40(1), 19-22.
- Dalkir, K. (2005). *Knowledge management in theory and practice*. Elsevier Butterworth–Heinemann.
- Davenport, H. T. (1997). Ten principles of knowledge management and four case studies. *Knowledge and Process Management*, 4(3), 187-208.
- Dei, D. J. (2017). *Assessing knowledge management systems implementation in Ghanaian universities*. (Doctoral dissertation). University of South Africa, Pretoria.
- Girard, J., & Girard J. (2015). Defining knowledge management: Toward an applied compendium. *Online Journal of Applied Knowledge Management*, 3(1).
- Huck, S. W. (2012). *Reading statistics and research* (6th ed.). New York, NY: Pearson
- Kalkan, V. D. (2017). Understanding knowledge management in academic units: *A framework for theory and research*. *European Journal of Business and Social Sciences*, 5(12): 1-14.
- Laloux, F. (2014). *Reinventing organizations: A guide to creating organizations inspired by the next stage in human consciousness*. Nelson Parker.
- Lee, H. Y. (2007). *Department chairs' perceptions of knowledge management strategies in colleges of education: Measurement of performance and importance by organizational factors* (Doctoral dissertation). Retrieved from dissertation abstracts international.
- Linstone, H. A., & Turoff, M. (Eds.). (2002). *The Delphi method: Techniques and applications*. reading. Addison-Wesley.
- Mao, H.; Liu, S.; & Zhang, J. (2015). How the effects of IT and knowledge capability on organizational agility are contingent on environmental uncertainty and information intensity? *Information Development*, 31, 358–382.
- McCarthy, A. F. (2006). *Knowledge management: Evaluating strategies and processes used in higher education* (Doctoral dissertation). Retrieved from ProQuest dissertations and theses database (UMI No. 3221289).
- Mohayidin, M. G., Azirawani, N., Kamaruddin N., & Margono, M. I. (2007). The application of knowledge management in enhancing the performance of Malaysian universities. *Electronic Journal of Knowledge Management*, 5(3), 301-312. Retrieved from <http://www.ejkm.com>
- Nonaka I. & Takeuchi H. 1995. *The knowledge creation company: How Japanese companies create the dynamic of innovation*. Oxford University Press.
- Nonaka, I. (1994). A dynamic theory of knowledge creation. *Organisational Science*, 5(1), 14–37. <https://doi.org/10.1287/orsc.5.1.14>
- Nonaka, I., & Konno, N. (1998). The concept of ba: Building a foundation for knowledge creation.

- California Management Review*, 40(3), 40-54. <https://doi:10.2307/41165942>
- Obeidat, B.Y., Masa'deh, R.M., & Abdallah, A.B. (2014). The relationships among human resource management practices, organizational commitment, and knowledge management processes: A structural equation modeling approach. *International Journal of Business and Management*, 9, 9-26. <https://doi:10.5539/ijbm.v9n3p9>
- Paez-Logreira, H., Zamora-Musa, R., & VelezZapata, J. (2016). Relation analysis of knowledge management, research, and innovation in university research groups. *Journal of Technology Management & Innovation*, 11(4), 5-11.
- Parlby, D. (1997). *The power of knowledge: A business guide to knowledge management*. KPMG Management Consulting.
- Patel, T. R., & Patil, A. N. (2016). Review of knowledge management in higher education. *International Journal of Science and Research (IJSR)*, 4(11), 2062–2065. doi:10.21275/v4i11.nov151609
- Paudel, K. P., (2019). Constructing scale on knowledge management: Appreciating standard or self-constructed tools? *International Journal of Interdisciplinary Studies, Crossing the Border*, 7(2), 32-43.
- Rummel, R. J. (1967). Understanding factor analysis. *Journal of Conflict Resolution*, 11(4), 444-480. <https://doi:10.1177/002200276701100405>
- Samoila, C., Ursutiu, D., & Jinga, V. (2014). International Conference on Interactive Collaborative Learning (ICL): The position of the remote experiment in the experiential learning and SECI??????????
- Santos, J. R. A. (1999). Cronbach's alpha: A tool of assessing the reliability scales. *Journal of Extension*, 37(2), 1-5. Retrieved from <http://www.joe.org/joe/1999april/tt3.html>
- Shabbir, M., Wei, S., Nabi, G., Zaheer, A. N., & Khan, H. (2014). Job satisfaction status of public primary school teachers: A case of Pakistan administrative Kashmir. *European Journal of Education Sciences*, 1(4), 56-71. Retrieved from <http://ejes.eu/wp-content/uploads/2017/01/1-4-6.pdf>
- Shenoy, G. V., & Madan, P. (1994). *Statistical methods in business and social sciences*. Inter-India.
- Syed Mustapha, S. M. F. D., Sayed, B. T., & Mohamad, R. (2017). Measuring process Innovation on double-flanked conceptual model for knowledge sharing on online learning environments. *Journal of Theoretical and Applied Information Technology*, 95(7), 499–1509.
- Turyasingura, W. (2011). *Interdependency of knowledge management and organizational learning: The case of higher education institutions in Uganda* (Doctoral dissertation). University of the Witwatersrand, Johannesburg.
- Wiig, K. M. (1993). *Knowledge management methods: Practical approaches to managing knowledge*. Schreiner Press.
- Yusoff, M., Mahmood, A., & Jaafar, J. (2012). A study of KM process and KM enabler in a Malaysian community college. *Journal of Knowledge Management Practice*, 13(1). Retrieved from <http://www.tlinc.com/articl297.htm>

htm

Krishna Prasad Paudel <https://orcid.org/0000-0001-9660-1369> holds Ph.D. in Educational Leadership and Management from Kathmandu University, Nepal. He has been involving in the different colleges and universities as a visiting faculty for more than a decade. He has worked in the Supreme Court of Nepal as Director of Information Technology.
Email: kpaudel.np@gmail.com