Management Skills of Academic Leaders and Teaching Effectiveness of Faculty in MIMAROPA SUC's: Basis for 21st Century Management Framework

Rosalinda P. Magararu Information Technology Department, Occidental Mindoro State College, Philippines magararurosalinda@gmail.com

Abstract-This study focused on the management skills of the academic leaders, its effects on teaching effectiveness of the faculty of the State Universities and Colleges (SUCs) in (MIMAROPA) Region IV-B which include (1) Mindoro State College of Agriculture and Technology; (2) Occidental Mindoro State College; (3) Marinduque State College; (4) Romblon State University; (5) Palawan State University, basis for 21st century management framework. The respondents of the study were 98 school academic officials comprising the Vice-President for Academic Affairs, Deans, Directors, Program Head/Programs Coordinators; and 256 regular faculty members of the five (5) State Universities and Colleges in the MIMAROPA region. Result shows significant difference on the management skills of the academic leaders of SUCs in MIMAROPA across indicators. It is reflected in the computed F value (3.605) which exceeds at 1.97 at .05 level of significance, the null hypothesis is rejected. This finding implies that management skills of the academic leaders in MIMAROPA differ in terms of technical. interpersonal, conceptual, diagnostic. communication, decision making and time management skills. Meanwhile, an overall mean score of 4.39, implies that faculty of SUCs in MIMAROPA was effective in their teaching performance. Furthermore, the academic leaders' management skills described as moderate extent in technical, interpersonal, conceptual, diagnostic, communication, decision making, and time management as revealed by the overall mean of 3.47. However, there are still some skills needs to improve both by the academic leaders and teachers of State Universities and Colleges for the continuous development of their organization. Based on the result the proposed 21st Century management framework recommended.

Index Terms—Management skills, teaching effectiveness, 21st Century Management Framework

I. INTRODUCTION

Throughout the history, human beings both managed and being managed [1] Management is complicated even in small organization. The causation of the complication of management is based on people. There have been numerous different definition of the concept of management. [2] explains management as the process of motivating people by organizing and coordinating them so that they can come together and perform the duties that

Manuscript received July 2, 2021; revised January 26, 2022.

will help the organization to achieve its goals, [3] describes management as the process of reaching previously defined goals of an organization by using the sources actively and efficiently with the help of planning, organizing, leading and control functions. For the thinkers who see the management as a process, management is the process that involve whole efforts to direct a group of people to the aims that identified before and provide coordination with the help of collaboration across the group [4] In other words, management is a tool or it is about the tools that is responsible for successful completion of the aims of organization.

Problems in management may be attributed to lack of skills and competencies necessary in managing an institution. Passing the baton would not so handy without the inspiration of planning, organizing, controlling and leading in which educators must work on with these competencies in management [5].

To carry out these management functions most effectively, managers rely on a number of specific skills. The most fundamental management skills are technical, interpersonal, conceptual, diagnostic, communication, decision-making, and time- management skills [6].

Moreover, the effectiveness of the teachers is dependent on their beliefs and behaviors. It is also concerned with the teachers' ability or capability to bring about change in their students' particularly teaching efficacy beliefs.

It is in this juncture that the researcher, in recognition of the possible potentials of the models, decided to conduct an assessment of the management skills of school leaders that could influence to the teachers effectiveness which in turn lead the school empowerment and student development.

This study will give insights on the different management skills that provide educators better ways to improve an institution and be prepared to meet challenges of the new millennium.

II. METHODS USED

A. Research Design

The descriptive – correlational method of research was employed in undertaking this study.

Descriptive research design was utilized to describe the management skills of academic officials and teaching effectiveness of faculty of State Universities and Colleges in MIMAROPA Region. Meanwhile, correlational technique of research enabled the researcher to assess the relationship between the independent variables in relation to dependent variables.

Correlational research design involves collecting data in order to determine the relationship between and among the variables and to assess how each one links to the other.

B. Description of the Sample

The respondents of the study were the designated academic leaders such as the Vice-President for Academic Affairs, Deans/Directors, Program Heads, Program Coordinators and regular/full-time faculty members of the State Universities and Colleges (SUCs) in (MIMAROPA) Region IV-B which include (1) Mindoro State College of Agriculture and Technology; (2) Occidental Mindoro State College; (3) Marinduque State College; (4) Romblon State University; (5) Palawan State University.

The study used two groups of respondents: the school academic leaders comprising the Vice-President for Academic Affairs, Deans, Directors, Program Head/Programs Coordinators; and the faculty members. Due to limited number of academic leaders, complete enumeration is considered in the selection of respondents of the study. However, not all academic leaders responded and submitted back the survey questionnaires. Out of 160, only 98 responded on the survey.

For the selection of faculty-respondents, proportional stratified random sampling was used, due to the fact that the population consists of five (5) sub populations. The selection of the respondents was done using the power analysis in the STATISTICA software. [7]

C. Data Gathering Tool

To gather pertinent data of the study, the standardized instrument developed by [8], on the management skills of administrators and that of [9] on teaching effectiveness were adapted.

Two questionnaires were used in the study. The first questionnaire deals on items that measure the extent of the management skills practices of the school academic leaders in terms of technical, interpersonal, conceptual, diagnostic, communication, decision-making and timemanagement. The questionnaire consists of 56 items.

The second questionnaire referred to the teaching effectiveness of the college faculty. The 56 items questionnaire was administered to the respondents.

All responses provided by the respondents were tabulated, and scored based on a 5 – point numerical scale. Each point got the corresponding verbal description.

A letter of request duly signed of the Director of Graduate Studies to seek permission and assistance in gathering data for the study was sent to the different Presidents of the State Universities and Colleges. Upon approval of request, copies of the questionnaire were distributed to the respondents personally with the assistance of some personnel from the SUC. Data

gathering was done based on the availability of respondents. Interviews was also conducted to supplement and confirm the data that were gathered. After all the data have been collected, these were classified, tabulated, analyzed, and interpreted.

III. RESULTS AND DISCUSSIONS

As shown, the academic leader's management skills described as moderate extent in technical, interpersonal, conceptual, diagnostic, communication, decision making, and time management as revealed by the overall mean of 3.47.

TABLE I. SUMMARY OF THE MEAN ON THE EXTENT OF MANAGEMENT SKILLS OF THE ACADEMIC LEADERS OF SUC'S MIMAROPA

Items	Mean	Rank	Description
Technical	3.29	5	Moderate Extent
Interpersonal	3.35	4	Moderate Extent
Conceptual	3.22	7	Moderate Extent
Diagnostic	3.24	6	Moderate Extent
Communication	3.37	3	Moderate Extent
Decision Making	3.43	2	Moderate Extent
Time Management	4.40	1	Moderate Extent
Overall Mean	3.47		Moderate Extent

The study shows that time management skills ranks first with a mean score of 4.40, followed by decision making skills which obtained the mean score of 3.43, communication skills got 3.37, interpersonal skills 3.35, technical skills 3.29, diagnostic skills 3.24, and conceptual skills 3.22 who got the lowest rank, all were interpreted as moderate extent. (See Table I)

As indicated in the table the academic leaders mean 4.40 interpreted moderate extent showed that academic leaders are time based oriented in managing time as a skill, which denotes that the time management skills of academic leaders are efficient. The use of time wisely in management determines better output in a long term process on the onset of diminishing in returns.

TABLE II. SUMMARY OF THE MEAN ON THE LEVEL OF TEACHING EFFECTIVENESS OF FACULTY OF SUCS IN MIMAROPA IN TERMS OF PERSONAL AND PROFESSIONAL CHARACTERISTICS AND INSTRUCTION

Items	Mean	Rank	Description
Personal and Professional Characteristics Knowledge	4.44	3	Effective
Attitudes	4.46	1	Effective
Intelligence	4.34	6.5	Effective
Instruction Teaching Strategies	4.34	6.5	Effective
Guidance Counseling	4.45	2	Effective
Classroom Management	4.36	4	Effective
Assessment for Learning	4.35	5	Effective
Overall Mean	4.39		Effective

Table II shows the summary results of the Mean on the level of teaching effectiveness of faculty of SUCs in

MIMAROPA in terms of personal and professional characteristics and instruction.

The summary of the mean level of teaching effectiveness of faculty of SUCs in MIMAROPA signifies that "attitudes" under personal and professional characteristics of the faculty got the highest mean score

of 4.46 interpreted as very effective. With regards to skills of faculty "guidance skills" got the second rank to the highest with a mean score of 4.45, followed by "knowledge" 4.44, evaluation skills 4.35, teaching skills and intelligence both 4.34.

TABLE III. MULTIPLE REGRESSION ANALYSIS BETWEEN THE MANAGEMENT SKILLS OF ACADEMIC LEADERS AND TEACHING EFFECTIVENESS OF THE FACULTY OF SUCS IN MIMAROPA

Independent Variables	Dependent Variables	Multiple r	Adjusted r	Beta Coeffi- cient	<i>p</i> -Value	Description
Technical	Personal and Professional Characte- ristics	.416	.238	.040	.834	Not Significant
Inter-personal				.067	.746	Not Significant
Diagnostic				.127	.526	Not Significant
Conceptual				.462	.023	Significant
Communication				.373	.035	Significant
Decision- Making				.320	.021	Significant
Time Management				.059	.766	Not Significant
Technical	Instruction	.432	.198	.098	.603	Not Significant
Inter-personal				.038	.852	Not Significant
Diagnostic				.129	.516	Not Significant
Conceptual				.511	.012	Significant
Communication				.382	.030	Significant
Decision- Making				.359	.037	Significant
Time Management				.042	.831	Not Significant

Table III reflects the results of the regression analysis between the extent of management skills of the academic leaders and the level of teaching effectiveness of the faculty members of SUCs in MIMAROPA.

Since the teaching effectiveness of the faculty is categorized into two, the personal professional characteristics and instruction, two multiple regression analysis were computed. In each regression analyses, the seven (7) indicators/skills of academic leaders' performance such as technical, interpersonal, diagnostic, conceptual, communication, decision making and time management entered into regression model.

In the first multiple regression analysis, the relation between the academic leader's management skills and teachers' teaching effectiveness in terms of personal and professional characteristics, the multiple r value of .416 relationship. moderate This signifies relationship is backed-up by the coefficient of determination or adjusted r2 value of .230. This implies that 23.1% of the variation in the personal and professional characteristics in terms of knowledge, attitude and intelligence of the faculty are accounted to the performance of their respective academic leaders. Of the seven skills exhibited by their academic leaders, three (3) were found to have significant relationship to their teaching effectiveness, particularly, in the personal and professional characteristics. These are the conceptual skills, communication skills and decision making skills. Other indicators were found no relationship in the teaching effectiveness.

The Beta coefficient of .462 in conceptual skill implies that as the academic leaders exhibited conceptual skills, faculties' level of teaching effectiveness increases by 46.2%. The p-value of .023 shows that the influence of

academic leaders' conceptual skills to the faculties' teaching effectiveness is significant.

Likewise, for the communication skills, the betacoefficient of .373 explains that 37.3% of the increased in the teaching effectiveness of the faculty is attributed to the demonstration of good communication skills of their academic leaders. The p-value of .035 proves that their relationships is significant.

Moreover, the beta coefficient of .320 indicates that the good decision making skills of the academic leaders contributes 32% on the increased of teaching effectiveness of the faculty. The p-value showed significant relationship. According to [7] good decision making by the administrators making subordinates increase of teaching effectiveness.

Similar in the first multiple regression analysis, the relationship between the management skills of the academic leaders to the teaching effectiveness of the faculty in terms of skills has moderate relationship as reflected in the multiple r of .432. The moderate relationship is supported by the coefficient of determination or adjusted r2 value of .198 which indicates that 19.8% of the variation in the teaching effectiveness of faculty is influenced by the academic leaders' management skills. This implies that how the academic leaders demonstrate their skills especially in conceptual, communication and decision making matter most in the improvement of the faculties' teaching effectiveness.

The beta coefficient of .511 for conceptual skills implies that 51.1% in the increased level of teaching effectiveness is influenced by the conceptual skills shown by their academic leaders. The good performance of the academic heads in terms of conceptual skills, the more

the teachers' application of their teaching skills is enhanced.

The communication skills of the academic leaders also give significant contributions in the improvement of the faculties' teaching effectiveness in terms of skills. The beta coefficient of .382 explains that every time the academic leaders show or perform good communication, 38.2% of the faculties' communication skills was improved or developed. This p- value of .030 confirmed the significance of their relationships.

Lastly, the good decision making skills of the academic leaders gave significant contributions in increasing the teaching effectiveness of the faculty, particularly their skills in teaching, guidance, management and evaluation. The beta coefficient of .359 states that for every good decisions their leaders demonstrated, 35.9% of their teaching skills were improved.. As mentioned by [10], management analysts have developed models that assist managers in choosing the correct decision making style.

TABLE IV. ANOVA RESULTS FOR THE INDICATORS OF THE MANAGEMENT SKILLS OF THE ACADEMIC LEADERS OF SUCS IN MIMAROPA

Variable	Compared Groups	Mean	SD	F -value	<i>p</i> -value	Description
Management Skills	Technical Skills	3.29	.42	3.605	.003	Significant
	Interpersonal Skills	3.36	.46			
	Conceptual Skills	3.22	.45			
	Diagnostic Skills	3.24	.47			
	Communication Skills	3.43	.48			
	Decision -making Skills	3.41	.44			
	Time Management Skills	3.46	.46			

Table IV presents the Analysis of Variance (ANOVA) results for the indicators of the management skills of academic leaders of SUCs in MIMAROPA.

Result shows significant difference on the management skills of the academic leaders of SUCs in MIMAROPA across indicators. It is reflected in the computed F value (3.605) which exceeds at 1.97 at .05 level of significance thus, the null hypothesis is rejected.

This finding implies that management skills of the academic leaders in MIMAROPA differ in terms of technical, interpersonal, conceptual, diagnostic, communication, decision making and time management skills.

IV. THE PROPOSED FRAMEWORK

As more countries require better achievement from their schools and grant greater autonomy to schools in designing curricula and managing resources, the role of the school leader has grown far beyond that of administrator.

Nevertheless, theory and research provide relative agreement on the importance of seven core management skills. The skills framework used in this study, based on these seven core skills, was developed from this body of theory and research. The framework was then refined and validated through surveys and interviews with different SUCs school leaders. These leaders reflect a cross section of higher learning institution, organization size and level, and functional area.

As shown in Fig. 1, school leaders need proficiency in using core skills: technical, interpersonal, conceptual, diagnostic, communication, decision-making, and time management skills. Effectively blending these skills in behavior and actions with the effective execution of basic managerial functions and roles will enhance the team, unit, organizational success, and teaching effectiveness of an institution.

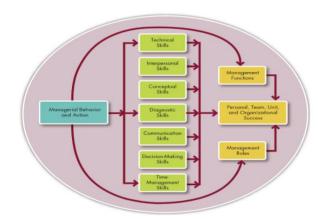


Figure 1. Proposed 21st century management framework for school leaders and faculty members in MIMAROPA SUC's

V. CONCLUSION

Based on the findings, the following conclusions were derived:

The prevalent management skills being practiced by the academic leaders of State Universities and Colleges in MIMAROPA were time - management, followed by communication, interpersonal, decisionmaking, technical, diagnostic, and the least practice is that conceptual. Faculty displays confidence in teaching and that has a high degree of tolerance for tensions. The faculty shows very well the lesson, uses simulations and other technological aids in teaching, and learn to create a classroom that encourages students to participate, and identifies the necessary conditions for a group to function successfully. Teaching effectiveness of the faculty is just moderately affected by management skills of academic leaders. Findings implies that management skills of the academic leaders in MIMAROPA differ in terms of technical. interpersonal, conceptual, diagnostic, communication, decision making and time management.

VI. RECOMMENDATIONS

The school leaders should revisit from time to time the institutional goals or desired expectations towards network expansion in improving external linkages and services and more focus on the consistency of building successful teams in the workplace with the support from an outsourced community for sustainability. The school leaders should continue to practice the re-evaluation of programs and policies adopting democratic principles and collaborative efforts within the organization in dealing with school issues and concerns. Furthermore, organizational analysis should be a priority in determining strengths and weaknesses as reviewed with a reflective response of action.

School leaders should continue to practice efficient and effective time management as an organizational policy promoting quality assurance and productivity. School leaders should always put into practice a time management skill by developing a systematic, measurable, attainable, realistic, and time bound system approach.

The proposed 21st Century management framework is recommended to enhance and strengthen the management skills of the academic leaders and the level of teaching effectiveness of the faculty members among SUC's in MIMAROPA Region.

CONFLICT OF INTEREST

The author of this paper declares no conflict of interest for conflict of interest.

AUTHOR CONTRIBUTION

The author wrote the research, conducted and analyzed the data.

ACKNOWLEDGEMENT

Many thanks to all the school administrators of the different State Universities and Colleges in MIMAROPA Region, especially the SUC's presidents, deans, programs heads, and faculty in allowing to conduct of data gathering in this study. Thank you also to OMSC - RDE Unit and IT family. Special thanks to my husband Pastor Adlin I. Magararu and children namely: Joni, Jonel, Jonelyn, Jeanny, Jessa and to my five little stars Faith, Hope, Olive, Zion and Jenel for being my inspiration. To the Almighty God, the source of wisdom, knowledge, understanding, and extra strengths for with Him nothing shall be impossible. To Him all the praises, honor and glory.

REFERENCES

- Z. Borsahoglu, A Study on the Perceptions of Leaders: Management Effectiveness, (H.U. Journal of Education), 2000, pp. 195-204.
- [2] B. Basaran, "Effects of operational and structural conditions on inventory management in large manufacturing enterprises," Instanbul University Journal of the School of Business., 2013, pp. 41-60.
- [3] E. Eren, "The effects of strategic management practices on the performance of the universities in turkey," *Journal of Global Strategic Management*, vol. 1, no. 7, pp. 17-17, 2013.
- [4] Z. Simsek, "Top management compositional effects on corporate entrepreneurship: The moderating role of perceived technological uncertainty," *Journal of Product Innovation Management*, vol. 30, no. 5, 2013.
- [5] A. Tan, "Management skills of administrators in christian schools: Basis for a proposed capability building program," *Pamantasan ng Lungsod ng Maynila*, 2012.
- [6] W. Griffin, Fundamentals of Management, 4th edition, Houghton Mifflin Company, USA: New York, 2007.
- [7] J. Cohen, Statistical Power Analysis for the Behavioral Science, Second edition, Department of Psychology, New York University, 2014.
- [8] A. Tan, Management Skills of Administrators in Christian Schools: Basis for a Proposed Capability Building Program, Pamantasan ng Lungsod ng Maynila, 2012.
- [9] M. Alo, Classroom Management: Its Relation to Teaching Effectiveness, Central Mindanao Colleges Kidapawan City, 2011.
- [10] H. Villagracia, Leadership Style and Work Commitment in System Technology Institute: An Enhancement Training for Nurse Educators, Pamantasan ng Lungsod ng Maynila, 2008.

Copyright © 2022 by the author. This is an open access article distributed under the Creative Commons Attribution License (CC BY-NC-ND 4.0), which permits use, distribution and reproduction in any medium, provided that the article is properly cited, the use is non-commercial and no modifications or adaptations are made.



Rosalinda P. Magararu, EdD was born in Labangan Poblacion, San Jose, Occidental Mindoro in 1965. She is a full-time faculty member of Occidental Mindoro State College, San Jose, Occidental Mindoro and currently a member of Research Ethics Committee and Guidance Advocate of the said institution. She served as an assistant treasurer of the OMSC Federated Faculty Association from 2016-2018 and currently an auditor of the same.

She was elected as member of the Board of Director of OMSC/Multi-Purpose Cooperative from 2018 to 2020. She is also the founding organizer and awarded as an outstanding organization adviser of Campus Christian Ministry since 2013 to 2020. She was also nominated during the search of Outstanding Faculty 2011-2012 by the Civil Service Commission. She obtained her Master of Arts in Development Education at Occidental Mindoro State College. She graduated her Doctor of Education major in Educational Management at Mindoro State College of Agriculture and Technology-University in Victoria, Oriental Mindoro. Since 2011, she has been actively involved in the conduct of research in science education in the tertiary level of the institution. All of her research conducted was presented and some were published with the different national and international research forum and conferences. She is happily married with six professional children.