

SCHOOL HEADS MANAGERIAL SKILLS IN TEACHING CORE SUBJECTS AMONG SENIOR HIGH SCHOOLS IN MAGUINDANAO PROVINCE



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 27

Issue 5

Pages: 503-528

Document ID: 2024PEMJ2580

DOI: 10.5281/zenodo.14030740

Manuscript Accepted: 10-01-2024

School Heads Managerial Skills in Teaching Core Subjects among Senior High Schools in Maguindanao Province

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Abstract

This study examines the managerial skills of school heads in teaching core subjects in senior high schools in Maguindanao Province. The research specifically focuses on assessing the proficiency of school heads in areas such as planning, staffing, directing, controlling, organizing, and monitoring. The study adopts a descriptive evaluation design and employs survey questionnaires to collect data from 126 teachers and their school heads. The key findings reveal that most respondents were predominantly female, married, and relatively young, holding bachelor's or master's degrees. In terms of managerial skills, school heads excelled in planning, controlling, and monitoring, while their performance in staffing, directing, and organizing was moderate. Teachers were found to be highly effective in delivering core subjects, which suggests a positive teaching-learning process. The study concludes that enhancing staffing, directing, and organizing skills is necessary to improve the overall effectiveness of school management. Additionally, encouraging teachers to pursue advanced degrees could contribute to improved educational outcomes. The study also recommends expanding similar research to a broader scope within the Bangsamoro Autonomous Region and comparing the managerial skills of school heads in public and private schools.

Keywords: *school heads, managerial skills, teaching, core subjects*

Introduction

Managerial skills fall into three basic categories: technical, human relations, and conceptual skills. Specialized areas of knowledge and expertise and the ability to apply that knowledge make up a manager's technical skills. Human relations skills include the ability to understand human behavior, and conceptual skills are to communicate effectively with others, and to motivate individuals to accomplish their objectives.

Leadership of mathematics Teachers' professional Development, leadership has long been recognized for having a significant impact on teacher learning. The study highlights the importance of building teachers' sense of ownership and having a shared overarching goal for participating in program. Moreover, there must be a structure and a practice for development work at school. If a plan for development in practice is to be successfully implemented and fulfill teachers' need for continuous development support, then a successful leadership will achieved.

The principal can support teacher learning by creating a learning culture, shaping learning opportunities and providing resources, time, encouragement, and monitoring. (Desimone, 2009). School leaders need to acknowledge their role as facilitators for teachers' learning and ensure that proper learning conditions are established to create a culture of learning at the school. (Walker, 2007).

Among the oldest theory of Luther Gulick in 1937 subsequently amplified functions of administration. His well-known analysis of administrative behavior is popularly known as POSDCoRB, an acronym for his seven administrative procedures such as: Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting. In spite of the efforts and resources invested by the government for the improvement of management, there still no evident sign that we gained some advancement in management of schools.

The researcher was driven to investigate how the school heads implement their managerial skills implementation towards their teachers. This study was conceived in view of this question, however, the assessment is limited only to the management of Senior High Schools in terms of planning, staffing, directing, controlling, organizing, and monitoring skills and its effectiveness and efficiency on teachers in Maguindanao Province.

Research Questions

Generally, this study will be determining the school head management on teaching core subjects among Senior High Schools in Maguindanao Province. Specifically, the study sought to answer the following research questions:

1. What are the profile of the respondents in terms of:
 - 1.1. gender;
 - 1.2. civil status;
 - 1.3. age;
 - 1.4. number of years in teaching; and
 - 1.5. educational attainment?
2. To what extent is the school head managerial skills on teaching core subjects among Senior High Schools in Maguindanao

Province in terms of;

- 2.1. planning;
- 2.2. staffing;
- 2.3. directing;
- 2.4. controlling;
- 2.5. organizing; and
- 2.6. monitoring?

3. What is the level of effectiveness and efficiency of the methods of teachers in teaching core subjects in terms of;
 - 3.1. efficiency; and
 - 3.2. efficacy?

4. Is there significant relationship between the managerial skills and effectiveness and efficiency of teaching core subjects?

Methodology

Research Design

This study used the descriptive evaluation design for a complete and accurate description of the data gathered. This design describes and evaluates the current state of a situation. It also presents facts concerning the nature and status of anything or information's needed in the study. The descriptive design often involved in determining the degree to which variables are associated. This design also marks clear statement of the decision problem, specifically, research aims and detailed information needed. It also characterized with a careful planned and structured design to ensure design and will design accuracy of the findings.

Respondents

The respondents of the study were the teachers and school heads of selected Senior High Schools offering STEM Strands in Maguindanao Province. A total of 126 teachers teaching core subjects including their respective school heads were chosen as respondents of this study.

Complete enumeration of the secondary schools in the Maguindanao I division were used as respondents by the researcher. Since Maguindanao province has two divisions, such as: Maguindanao I division and the Maguindanao II division, the researcher takes all the high schools in Maguindanao I division completely. The researcher has completely used the entire teachers who were teaching core subjects in the senior high schools operating in Maguindanao 1 Division.

Instrument

The researcher made use of a modified questionnaire which was divided into three (3) parts; the profile of the respondents, the school head managerial skills and teaching effectiveness and efficiency among senior high school in Maguindanao Province.

Part I: Profile of the respondents includes informational data, such as: gender, civil status, age, years in teaching, and educational attainment.

Part II: the school head managerial skills on senior high schools, such as: Planning, Staffing, Organizing, Directing, Controlling, and Monitoring Skills in Maguindanao Province.

Part III: Teachers teaching effectiveness and efficiency in teaching core subjects in the senior high school.

Impliedly, the triangulation part was used in the form of an interview to school heads whose functions and populations were indeed big because challenges in the management were indeed affected and really different as compared to schools which have a small population.

Procedure

The study used the two-way method in collection of data. The data collection tools include the survey questionnaire and the informal interview.

With valid and reliable instrument, the researcher secured the approval of the Dean of the Graduate School for the conduct of the study particularly the data gathering. Furthermore, the researcher seeks the permission of the Schools Division Superintendent for the conduct of the study.

Upon the approval of the Schools Division Superintendent, finally, the researcher sought permission again to the school heads/principals for the conduct of the study. The instrument was personally administered and interview was conducted from the school heads and teachers where data was collected. The data obtained from these sources were encoded in the computer using the excel program. The encoded data will be analyzed using the Version 25 of the Statistical Package for Social Sciences (SPSS) for the computation and interpretation of the data that will be presented in the discussion of this study.

Data Analysis

Data analysis included in this study will be using descriptive statistical tools. For the descriptive problem of the study, frequency, percentage, mean and standard deviation will be used. For the inferential problems, Pearson correlation product analysis will be used to explain the relationship of the independent variable over the dependent variable. In applying these statistical tools and techniques, version 25 of the Statistical Package for Social Sciences (SPSS) was used by the researcher with the help of the statistician.

Results and Discussion

This section of the paper presents the profile of the respondents of the study and the analysis of the data and their presentation generated through the use of the survey questionnaire. This chapter specifically discusses the results of the analysis based on the specific problems mentioned in the Chapter I of this study.

Part I – Profile Of The Respondents

The data gathered included were the gender, civil status, age, years in teaching core subjects in senior high school and educational attainment of the respondents.

Gender

Table 1 shows the frequency distribution of the respondents in terms of gender.

Gender	Frequency	Percentage
Male	43	34.1
Female	83	65.9
Total	126	100.0

Table 1 shows that out of 126 respondents of this study, 83 or (65.9 percent) were female and 43 or (34.1 percent) were male. This means that female faculty who were teaching in the senior high school has the most number as compared to male. This table does not further inquire as to how and what were the processes why majority who were hired were female.

In Slovenia, as in many countries, the teaching profession was one of the first to become accessible to women, who were allowed to enter the labour market. In 1869, the Habsburg Monarchy passed the Primary Education Act, which prolonged obligatory primary schooling to eight years and declared the formal equality of female and male teachers paid by the state. Some years after this Act came into force, the first female college of education was established (1871), which was at the same time the first public education institution that allowed women a higher education (Milharčič Hladnik, 1995). Only a few decades later, women already prevailed among primary teachers. However, despite their statutorily defined equality, the status of women was essentially different to that of men: they were not only paid less, but were also more highly supervised than men (until 1918, they were obliged by law to practise celibacy) (ibid.). Despite this (or better: partly because of this), female teachers were the bearers of important social changes in the field of political and other rights of women and girls, not only in the teaching profession. Female teachers were the most educated women and were aware of the position of women in society. It therefore comes as no surprise that they were the first to strive for the right of female teachers to vote. After the demand of the Catholic journal Slovenian Teacher in 1901, the Society of Slovenian Female Teachers followed suit later the same year. The demand for the right of female teachers to vote later grew into the demand for voting rights to for all women (Antić Gaber, Rožman & Selišnik, 2009). As Milharčič Hladnik (1995) stresses, although female teachers in the nineteenth century were respected, they were also subject to suspicion and resistance, as education was presented as a threat to the fulfilment of the natural roles of women, and to the earnings of men: at that time, women were still employed mainly because their work was cheaper.

Today, women still prevail in teaching professions, which could be attributed to a number of demographic, economic, political and cultural factors: the need for teachers due to demographical factors, the accessibility of education, meritocracy, the general employment possibilities, the possibility of reconciling professional and family work, the regulation of maternity leave and leave for childcare, etc. (Acker, 1995). In Slovenia, another factor is that teaching represents relative secure employment due to the vast network of public nursery schools and schools, and to the relatively small gap between the needs of employers and the number of adequately educated candidates.

Studies have shown that teachers' gender has its role on the effectiveness of teachers. According to Norlander – Case, Regan and Case (1999) women tend to perform better in teaching than their male counterparts. This view is also supported by Mwamwenda and Mwamwenda (2002). For Mwamwenda and Mwamwenda, female teachers performed significantly better than pupils taught by male teachers in English Language, Mathematics, Science and Social studies in Botswana. Zuzovsky (2003) also reported that in her study in Israel, students taught by female teachers achieved more than those taught by male teachers. However, Abrami and d' Appollonia (1999) and d' Appollonia and Abrami (1997) opined that teachers' gender characteristics may not influence student's learning. This observation is supported by Centra and Caubatz (2002) and Kite (2001). This finding is also in line with Kong (2008) who declared that no research has connected test results to teacher gender. However, the studies of Arbuckle and Williams (2003) declared that male

teachers performed better than female teachers in areas of asserting authority and using meaningful voice tones during teaching. This finding is not different from that of Martin and Smith (1990) who opined that male teachers were rated higher in their performance than their female counterparts.

Civil Status

Table 2 shows the frequency distribution of the respondents in terms of civil status.

Table 2. Frequency Distribution of the Respondents In Terms of Civil Status $n = 126$

Civil Status	Frequency	Percentage
Single	37	29.4
Married	88	69.8
Widow/er	0	0.0
Separated	1	0.8
Total	126	100.0

Table 2 reveals that of the 126 respondents, 88 or (69.8 percent) were married, 37 or (29.4 percent) were single and 1 or (0.8 percent) was separated. This means that teachers who take the challenge in teaching core subjects in the senior high school were married and only 37 or 29.4 percent were single. The profiling of the respondents with respect to civil status does not profoundly inquire as to whether respondents got married before or after having their absorption in the senior high school department.

Studies on the influence of teachers' age, marital status and gender on students' learning have found a significant connection between teachers' effectiveness and teachers' age, marital status and gender. Few studies, however, exist in literature on teachers' age and academic achievement of students. The reason according to Sloane & Kelly (2003) is that most developed countries such as America do not care about the age of a teacher. A study on teachers' age carried out in Turkey by Martin and Smith (1990), teachers' age was grouped into three levels – young age, middle age and old age. The study revealed that middle aged teachers were perceived by learners to be more effective in classroom organization, motivation, communication and competence. On the other hand, the study of Goebel and Cashen (1979) revealed that old teachers were rated lower on teaching skills than young or middle aged teachers. In Riley and Ryan (1969), younger teachers were rated contrary however; Dehanty (1977) found no significant difference between the ratings of old and younger teachers. This is also in line with Abrami and d'Appollonia (1999) and d'Appollonia and Abrami (1997). On the variable, teachers' marital status, Kong (2005) discovered that unmarried and married teachers had higher scores than those separated and divorced in the dimensions of job engagement, especially in the dimension of vigor and dedication. According to Zhang and Fang (1991) psychological problems such as separation and divorced affect teachers' dedication to duty. Kong (2009), however, posited that single teachers who do not have any family issues and more dedicated and committed to their jobs. For Ayeop (2003), married teachers have higher job satisfaction compared to single teachers and those in the group of others (that is, separated and divorced).

Age

Table 3 shows the frequency distribution of the respondents in terms of their age.

Table 3. Frequency Distribution of the Respondents In Terms of Age $n = 126$

Age Bracket	Frequency	Percentage
21 – 30	46	36.5
31 – 40	43	34.1
41 – 50	30	23.8
51 – 60	7	5.6
Total	126	100.00

Table 3 shows that most of the respondents were age 21 – 30 years corresponding to 36.5 percent, 34.1 percent, 43 years old has a frequency of 31 to 40 years corresponding to 34.1 %, there were 30 corresponding to 23.8 percent were age between 41 and 50 years and there were 7 of age 51-60 corresponding to 5.6 percent.

Teachers' ability to impart knowledge contributes significantly on students' achievements in schools (Alufohai & Ibhafidon, 2015). Studies have shown that teachers' variables such as age and teaching experiences has a certain impact on teacher effectiveness. Zafer and Aslihan (2012) found older teachers of age 41 years old and above are more effective in teaching and good in classroom

management skills than younger teachers in high school. This view is supported by Aloka and Bojuwoye (2013) who found that younger teachers often end up making morerisky decisions, did not analyze the context carefully when dealing with students disciplinary problems due to the lacked of experience and immaturity compared to the older teachers. The finding is not much different from the later study of Nyagah and Gathumbi (2017) in their cross-sectional survey in Kenya who found that older teachers were more likely to increase students' learning compared to their middle age and younger teachers.

On the average, the teachers teaching core subjects in the Senior High Schools in Maguindanao Province was 35.34 years of age. It implies that most of the teachers teaching core subjects in the Senior High Schools in Maguindanao Province were categorized as relatively young in age and the this could further show that most of the assigned teachers and probably applied in the senior high school were still at age were interest, passion and inclination to teaching is predominantly in the desirable age.

On the other hand, Sivasakthi and Muthumanickam (2012) found that younger teachers of age 30 years old and below, mature or middle age teachers of between 30 to 40 years old and older teachers of above 40 years old do not differ significantly in their teacher effectiveness which indicates that age, regardless of young, mature or older teachers does not make any difference to teacher effectiveness. Meanwhile, Martin and Smith (1990) conducted a study in Turkey found that middle age teachers were more effective in communication, classroom organization, and competence. In addition, Alufohai and Ibhafidon (2015) conducted a study in Edo State, Nigeria using proportionate sampling technique on selected public senior secondary schools showed middle-aged teachers of between the ages of 36 to 48 years old were more effective to produce higher students' score than younger and older teachers. Their findings also that the younger teachers of between the ages of 21 and 34 years old were more effective, produced higher student scores than the older ones of between the age of 49 years and above.

This table does not in any way inquire as to whether assignment were their personal volition and voluntariness or management discretion per se. This gaps may call for further inquiry in the succeeding study of similar types.

Years of Teaching Core Subjects

Table 4 shows the frequency distribution of the respondents in terms of number of years in teaching.

Table 4. *Frequency Distribution of the Respondents in Terms of Number of Years in Teaching n = 126*

Years in Teaching	Frequency	Percentage
1 – 8	66	52.4
9 – 16	42	33.3
17 – 24	15	11.9
25 – 32	3	2.4
Total	126	100.0

Table 4 shows that 66 of the respondents had already served in the teaching profession between 1-8 years corresponding to 52.4 percent, 42 of the respondents were already in the teaching profession between 9-16 years corresponding to 33.3%, 15 of the respondents were in the teaching profession for the period from 1 to 8 years; and 3 of the respondents had a teaching experience of 25 – 32 years corresponding to 2.4 percent.

Generally, majority of the respondents have been teaching up to 16 years. On the average, teachers in the senior high schools who were practicing their teaching profession 8 to 10 years.

These findings showed that the teaching experience can be considered as long enough to deliver the mandates of the senior high school in terms of instruction to give quality education to students. This further showed that the respondents experiences in teaching would somehow described as still in the aggressive stage.

However, the results were a revelation only of teaching experiences but this does not cover whether the length of teaching experience were the respondents experiences in teaching the core subjects in senior high school. Since, the latter was not covered by the study, that may be a subject of recommendation to include in the inquiry and setting some criterion on getting the respondents to be certain only on those who were teaching the core subjects. This is because the respondents might be already in the long service of teaching but relatively young in teaching the senior high school.

In terms of experience factor, Kartini, Badariah, and Ahamad (2010) found science teachers who had teaching experience of more than six years were more knowledgeable compared to teachers who had less years of teaching experience. Zafer and Aslihan (2012) discovered that teachers with more years of teaching experience showed significantly different attitudes toward classroom management like they seems to be more in control of their classrooms, good interactions with students and better in making decisions

than teachers with less years of teaching experience. For Fatma and Tugay (2015), teachers with a minimum of ten years of teaching experience are more effective in teaching and good in classroom management skills.

Putman (2012) demonstrated that the more years of teaching experience a teacher has, the higher level of their self-efficacies to engage students and manage the classrooms. However, Mahfooz ul Haq and Mumtaz Akhtar (2013) and Maolosi (2013) in their separate studies found years of teaching experience can affect teacher effectiveness in engaging students and teaching strategies as they can become less motivated due to many years in the service and fatigue.

Though the previous studies lack common agreement on the dimensions of work experience, however, there have been studies measuring the effect of work experience on work performance. For example, the earliest study measuring the effect of work experience on job performance found that work experience affected the level of productivity (Maranto & Rodgers, 1984). Later studies such as Quinones, et.al (1995) identified two dimensions of work experience such as measurement mode (amount, time, and type) and level of specificity (task, job, organizational) and its effect on the work performed. The study showed that the amount and the level are significantly correlated to job performance. Though the study of Dokko, et.al (2009) is not the same as the study of Quinones, et.al (1995), however, the results of their study indicated a similar finding, that prior experience and career history affect job performance. In a different context such as Indonesia, a similar study was also conducted by Putri (2020) and her study found a similar finding that work experience had a positive correlation with work performance, while job characteristics had a negative correlation with work performance. In summary, based on those researches, we can be certain that work experience is considered important in enhancing employees' performance or productivity. In line with such, then we can argue that performances differences are also contributed by experience. The amount or the length of experience can contribute to the difference in output or productivity of each employee.

Educational Attainment

Table 5 shows the frequency distribution of the respondents in terms of Educational Attainment of the respondents and their Field of Specialization.

Table 5.1. *Frequency Distribution of the Respondents In Terms of Educational Attainment*
n = 126

Educational Attainment	Frequency	Percentage
Bachelor's degree	69	54.8
Master's degree	56	44.4
Doctoral degree	1	0.8
Total	126	100.0

Table 5.1 shows that majority of the respondents has the highest degree of attainment of baccalaureate degree only which has the frequency of 69 corresponding to 54.8 percent; 56 of the respondents corresponding to 44.4 percent were completed their master's degree; and 1 has completed the doctoral degree corresponding to 0.8 percent.

This results did not in any way inquire as to whether the respondents had obtained their further degree on scholarship basis and the reasons on the reluctance of the majority why their desire to continue further education is remote or may be out of their plan. The researcher also did not inquire as to whether are there any respondents who had taken already master's units, doctoral units, completed the academic units of the program, how long they had been in the program whether continuously or broken years of schooling; whether the respondents had only relatively few semester in the new program or in the circumstances that call for the stoppage of the program; or whether the school does not allow further studies of the faculty due to few number of faculty and they school may encounter shortage of faculty; or the school does not recommend its faculty to pursue higher education ; or maybe there are no faculty development program of the school or the division under it. These gaps of the study in the pursuit of further and quality education may be subject of future study to obtain an in depth study about it.

In terms of the effect of educational background on work performance has been studied by many researchers and the result may not be conclusive. On one hand, the earliest study of Ariss and Timmins (1989) on the influence of educational background on the work performance among managers concluded that there is no significant relationship between managers' educational background and work performance. On the other hand, later studies found otherwise. Ng and Feldman (2009) studied the effect of educational background on job performance and the result showed that educational background is correlated to job performance. This finding is the same as the finding of Kasika (2015) which found a positive correlation between educational background and work performance. The study suggested that the higher the education becomes, the higher the performance is. These findings have been consistent with the earlier study of Beyhan (2008) about the impact of higher education on job preparedness and job performance among national police in Turkey. His study concluded that educational background is significantly correlated with job preparedness and job performance. However, there have been no studies related to the effect of educational attainment on the self-efficacy which is the reason of the current study.

Field of Specialization

Table 5.2 shows the frequency distribution of the respondents in terms of field of specialization.

Table 5.2 *Frequency Distribution of the Respondents In Terms of Field of Specialization*
n = 126

Course/Specialization	Frequency	Percentage
BSE/Specialization	69	54.80
Mathematics	14	11.11
General Science	11	8.74
Filipino	10	7.94
English	11	8.74
Physical Education	3	2.38
History	4	3.17
TLE	8	6.36
Agriculture	8	6.36
MA/MS – Specialization	56	44.40
Educational Management	12	9.50
School Supervision and Administration	15	11.90
Mathematics	9	7.13
English	8	6.36
Filipino	5	3.96
PE and Sports	3	2.38
TLE	4	3.17
Ed.D./Ph.D. – Specialization	1	0.8
Educational Administration	1	0.8
Total	126	100.0

Table 5.2 shows that all the core subjects in the senior high school were represented based on the field of specialization obtained by the respondents. Of the 126 respondents, 69 or (54.80 percent) finished their undergraduate course in different field of specialization such as: 14 or (11.11 percent) were major in Mathematics; 11 or (8.74 percent) were major in General Science and English respectively; 10 or (7.94 percent) were major in Filipino; 8 or (6.36 percent) were major in TLE and Agriculture respectively; 4 or (3.17 percent) were major in History; and 3 or (2.38 percent) were major in Physical Education.

There were 56 or (44.40 percent) were finished their Masters degree in different fields of specialization as follows: 15 or (11.90 percent) were major in School Supervision and Administration; 12 or (9.50 percent) were major in Educational Management; 9 or (7.13 percent) were major in Mathematics; 8 or (6.36 percent) were major in English; 5 or (3.96 percent) were major in Filipino; 4 or (3.17 percent) were major in TLE; and 3 or (2.38 percent) were major in Physical Education. Among the 126 respondents, only one or (0.80 percent) was finished his Doctor of Philosophy major in Educational administration.

It implies that 69 or (54.80 percent) of the respondents have not yet started their educational advancement to sharpen their skills on teaching with the assumption that higher educational attainment enhances teaching skills.

Looking at the table results, this can really show that there is a strength of the senior high school teachers simply because most of its teachers had finished their master's degree in their field of specialization. This means that the serving public can guarantee a better future of their students and their students can obtain a better education in the schools operating in the province of Maguindanao.

Content knowledge is defined as the disciplinary conceptual knowledge of the teacher. Good subject knowledge involves understanding the substance, content, structure and organization of the science subject itself. This is an important characteristic for quality teachers having good subject matter knowledge (Ingressol as cited in. Consequently, when teachers have a good subject matter knowledge, then they are able to help students understand the core ideas of various topics, create useful cognitive maps, as well as enable the students to connect each topic with everyday life examples and facts.

Further, Fennena and Franke opined that the perception of teachers for effective teaching of any subject depends to a large extent on the teachers' understanding of the nature of the subject matter and that perception of proper teaching is a consequence of a teacher being able to pass-on the content of the subject matter. Further, Ifiok also opined that a lack of required background and orientation relevant to curriculum, on the part of the teacher, leads to poor attitudes towards the implementation of a new curriculum, on matter how expertly the pages of the curriculum were designed and put together. To acquire high level of content knowledge in science is to possess the necessary educational qualification and area of specialization. It is common knowledge that a teacher cannot give what he does not have. Some works like those of Emeh and Erukoha (as cited in provided theoretical support for the importance of area of specialization and teachers effectiveness.

In the Philippines, a teacher must be a Bachelor of Science in Secondary Education (BSED) major in General Science to be able to teach all the science areas in the K-12 Science curriculum. However, due to shortage of teachers, graduates from other fields such as

Nursing and Pharmacy were hired to teach science subjects. It is in this context that this study is undertaken to determine how equipped the teachers hurdle the challenges imposed by the new educational scheme. Braskamp and Brandenburg indicated that teachers are in the best position to judge what and how they teach. In this study, the science teachers are the primary sources of data. Further, this study determines the area of specialization of the science teachers and their teaching performance in terms of content knowledge and its application within and across curriculum areas. It also aims to identify which groups of science teachers based on their area of specialization perform better in their teaching performance. The results of this study can be used as basis in the adoption of new recruitment policy for science teachers in the Philippines.

Part II – Managerial Skills

Results on the School Heads Managerial skills in the area of Planning, Staffing, Directing, Controlling, Organizing and Monitoring were discussed in this portion of the study.

Planning Skills

Table 6. *Mean Matrix on Management and Managerial Skills of School Heads in terms of Planning Skills n = 126*

Indicators	Mean	SD	Description
The School Heads are:			
1. Participates in the formulation of Goals and objectives are manifested.	4.33	.591	Highly Managed
2. States goals and objectives of Senior Highs clearly.	4.21	.773	Highly Managed
3. Organizes executive committee and School planning team to handle Strategic planning.	4.29	.646	Highly Managed
4. Conducts regular executive committee With school planning team meeting to Discuss academic and other issues and Concerns in the school.	4.19	.690	Moderately Managed
5. Ensures work assignments and Schedules of teachers works efficiently.	4.25	.644	Highly Managed
Overall Mean	4.253	.566	Highly Managed

Table 6, “Managerial Skills of School Heads in terms of Planning Skills” has an overall mean of 4.253 described as highly managed. This implies that the school heads had meet the qualification of running the schools though it is not covered by the study to determine whether the school heads had Ph.D degrees or its equivalent however, looking at the table results can really justify that school heads deserved their spots in the senior high schools.

Management Planning Kools and George (2020) described management planning as ‘a deliberative, disciplined effort to produce fundamental decisions and actions that shape and guide what an organization (or other entity) is, what it does, and why’ (Bryson, 2010, p. s256). Although strategic planning in the public sector has been around since the 1970s, it was the New Public Management (NPM) paradigm that fast tracked its adoption by public organizations since the 1990s onwards (George & Desmidt, 2014). The study looked into the necessity of developing public organizations as learning organizations and how strategic planning would impact the overall success of these public organizations. The article focused on a study of Wales which is currently in the idle of an educational reform focused on the implementation of a new school curriculum by September 2022 (Welsh Government, 2017).

Richard Daft (2014) defined management planning as the act of determining goals and defining the means of achieving them. The scholar identified varying levels of plans and goals in an organisation was presented in a pyramid indicating that the identified levels vary in terms of how broad and involving they are. Robins and Coutler (2014) identified a number of reasons why management planning is considered critical to the success of any management. Firstly, they opined that management planning provides direction to managers and non-managers as well. The scholars reported that if all members of an organisation (irrespective of their cadre) have a clear-cut understanding of the goals an organisation is seeking to achieve and what it would take to achieve it, they would cooperate with one another to ensure that the vision is attained. They further identified that members of an organisation will work at cross-purposes if they are not all aligned with respect to what has to be achieved and how to go about it. Secondly, management planning was described as an activity that significantly reduces uncertainty in an organisation. It compels managers to look ahead, make projections, anticipate changes and plan to respond appropriately to these changes as they occur. Planning indeed would not eliminate uncertainty, but it

would essentially prepare the organisation for these changes if well drawn and executed. Thirdly, the scholars observed and reported that planning minimises waste and redundancy. This becomes very plausible when work arrangements are drawn around well-laid plans so inefficiencies can be addressed appropriately. In other words, management planning helps to attain and maintain efficiencies in work arrangements. Management planning is hence deployed to identify, correct and or eliminate inefficiencies. Finally, planning is required to set up the standards for another critical management activity called ‘controlling’. In other words, without planning there would be nothing to control and measure. This hence means that planning is the most fundamental management function amongst the four identified primary functions of a manager and these are: Planning, organising, leading and controlling.

In essence, none of these listed activities can be successfully executed and measured without adequate and effective planning. The authors identified that numerous studies have researched the concept of management planning and reported the existence of a positive relationship between planning and performance. It was further reported that positive financial reports are largely associated with well-drawn management plans. A positive relationship was also reported between management planning, improved profits, higher return on investments and several other positive organisational success or growth indicators. The major strengths and weaknesses that can be drawn from the definition of Management Planning provided by Daft (2014) are summarily discussed in this section.

Primarily, Daft’s (2014) definition of management planning is essentially simple and straightforward. It is easy to recall and also easy to understand. In other words, the definition summarized the essence of management planning in very few words while essentially portraying the primary focus of management planning which is to achieve corporate goals. Another major strength of the definition is that it is essentially focused on how management goals are identified and how they are to be achieved. This hence propounds that management planning is primarily about management goals. The weaknesses observed in the definition include the fact that it comes across as overly simplistic. Its brevity provides grounds for it to have left out other salient constructs that would have further enriched the definition. Also, the definition failed to take into account the varying levels of management planning although he later on discussed these levels while discussing the concept. Summarily, Richard Daft’s definition and discussion of management planning can be described as having further enriched the scholarly discussions and body of work in that particular area of study.

Robins and Coulter (2014) defined management planning as an activity that involves defining the organisations goals, establishing strategies for achieving those goals, and developing plans to integrate and coordinate work activities. Management planning is considered to be concerned primarily about the ‘what’ and ‘how’ of management.

Both scholars jointly identified that formal planning focuses primarily on specific goals with specific timeframes. The goals have to be written and shared with members of the organisation so as to reduce if not remove completely ambiguity and then create a common sense of purpose regarding what has to be done individually and collectively. Summarily, they are of the opinion that specific plans are drawn with the aim of achieving set goals. Planning is described as the fundamental management function primarily because it is the basis for all other activities’ managers engage in. Planning provides the required guide for steps to be taken to achieve stated goals. The authors described management goals as the desired outcomes or targets. They guide management decision and provide the criteria to measure performance. These often include resource allocation, schedules and all other necessary actions to attain set goals. In essence, as managers plan, they develop goals as well. The scholars hence are of the opinion that management planning cannot be discussed without understanding goals and the various types of goals that can be identified.

Item 1, “Participates in the formulation of goals and objectives are manifested” had a highest mean of 4.33 described as Highly Managed. This implies that the teachers in the Senior High Schools in Maguindanao Province were involved in the decision making processes particularly in the formulation of goals and objectives of the school. The decision processes were limited only on matters related to support the national goals of the education department.

Item 2, “States goals and objectives of senior high school clearly” has a mean of 4.21 described as Highly Managed. This means that the goals and objectives set by the school heads were practically clear and easy to understand by the stakeholders. This set up of collaboration by the concerns sectors in the formulation and setting of goals and objectives were clearly in the language spoken by the stakeholders.

Item 3, “Organizes executive committee and school planning team to handle strategic planning” has a mean rating of 4.29 described as Highly Managed. This finding implies that the school heads of the senior high schools in Maguindanao Province organized different committees in their respective school that handle different activities in the school. This further implies that quality leadership in the senior high school was employed by the school heads to ensure that the school target are met.

Item 4, “Conducts regular executive committee with school planning team meeting to discuss academic and other issues and concerns in the school” has obtained a mean rating of 4.19 described as Moderately Managed. The usual meeting called before the pandemic period was shifted to online and done anywhere in the country however the stakeholders manifest their discontentment because quality has lost though there were many who really like to maintain status quo.

Finally, Item 5, “Ensures work assignments and schedules of the teachers work efficiently” has a mean of 4.25 described as Highly Managed. It implies that the work assignments of every teacher were planned well by the school heads of the senior high schools in Maguindanao Province. This further implies that assignments of teachers were all directed towards quality and effective services.

However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals' knowledge of pupils' rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads' knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

Eberwein (2008) initiated one of the largest studies in education law surveying 8,000 secondary school principals using the Principals' Education Law Survey developed by Militello, Schimmel, and Eberwein (2009). The results demonstrated an insufficient knowledge of the principals relating to the rights of students and teachers with a correct response rate of 65.27% to the 14 items on students' rights and 54.12% to the 20 items on teachers' rights.

Militello, Schimmel, and Eberwein (2009) conducted another study of 493 participants using their Principals' Educational Law Survey of 34 true-false questions on students' and teachers' rights. The results indicated a very high percentage of the principals (90%) believing that they could be liable for educational malpractice; about 45% who were unaware that schools have the right to impose strict dress codes; and about 50% who did not know about their Family Educational Rights and Privacy Act.

In the Philippine context, limited studies have been conducted to expose the literacy of school administrators.

In a case study involving 93 school principals from Cagayan de Oro City, Brooks and Sutherland (2014) found the need for these leaders to put student needs above all others and approach student support from a holistic perspective, thereby suggesting for professional development opportunities to be given to the teachers. Sindhvad (2009), however, found in his study involving 364 Filipino principals that support of these leaders largely depends on their belief of ensuing changes in instruction, job satisfaction, and their time and level of control.

Staffing Skills

Table 7 shows the result of the mean rating on management and management skills of school heads in terms of staffing skills.

Table 7. Mean Matrix on Management and Managerial Skills of School Heads in terms of Staffing Skills n = 126

Indicators	Mean	SD	Description
The School Heads are:			
1. Observes proper guidelines, standards And profiling on selecting teachers to Handle Core subjects of specialization.	4.06	.730	Moderately Managed
2. Establishes profiles and credentials of Teachers who handle core subjects.	4.15	.633	Moderately Managed
3. Facilitates teachers load assignment To handle core subjects.	3.98	.795	Moderately Managed
4. Utilizes teachers specializations to Handle core subjects and other related tasking.	4.11	.660	Moderately Managed
5. Utilizes other human resources to Handle core subjects in senior high School as necessary.	4.19	.701	Moderately Managed
Overall Mean	4.097	.583	Moderately Managed

Table 7, "the mean rating on management and management skills of school heads in terms of staffing skills" has an overall mean rating 4.097 interpreted as highly managed. This results imply that hiring of faculty members, placement and the loading set up of the faculty members in the senior high schools were really observed as a major concern in ensuring that quality education to students can be delivered.

Most definitions of recruitment emphasize the organization's collective efforts to identify, attract, and influence the job choices of competent applicants. Organizational leaders are painfully aware that recruiting talent is one of their most pressing problems. Tight labor markets give applicants considerable choice between employers, particularly for those in professional, information/knowledge-based, technical, and service occupations. Some reports indicate that nearly half of all employees are at least passively looking for jobs, and a sizable minority are continually actively searching (Towers Perrin, 2006). This is such a problem that many organizations actually

face a greater recruiting challenge than a selection challenge. Selection will only be effective and financially defensible if a sufficient quantity of applicants apply to the organization. Compounding this challenge is that many organizations struggle with how to attract a diverse workforce. Thus, there is growing recognition that recruiting—by itself and irrespective of selection—is critical not only for sustained competitive advantage but basic organizational survival (Taylor & Collins, 2000). Reflecting this importance, there have been several excellent reviews on recruitment (Breaugh & Starke, 2000; Highhouse & Hoffman, 2001; Rynes & Cable, 2003; Saks, 2005; Taylor & Collins, 2000). This review obviously does not provide the depth or detail of those reviews. Rather, this review selects the more recent developments with the greatest implications for organizational effectiveness.

The study investigated the relationship between the use of five staffing practices and organizational level measures of performance. These five staffing practices were (1) the use of follow-up studies of recruiting sources to determine which sources yield greater proportions of highperforming employees, (2) the use of validation studies for the predictors used in selection, (3) the use of structured, standardized interviews for selection, (4) the use of cognitive aptitude and ability tests for selection, and (5) the use of biographical information blanks (BIBS) or weighted application blanks (WABs) for selection.

The five staffing practices were chosen for inclusion in our study on the basis of two criteria: (1) the academic literature suggests that the practice should lead to increased levels of employee performance, and (2) the practice is infrequently employed by organizations, in general. HRM practices which are capable of positively influencing employee performance would seem to be worthy candidates for study. If enough evidence begins to accumulate which shows a link between some of these practices and organizational level measures of performance, more organizations might be encouraged to adopt them. This, in turn, could possibly lead to enhanced competitiveness for these firms. A brief review of each of the five staffing practices and the specific research questions addressed in our study follows.

As the quality of recruits turned up through various sources appears to vary significantly, most HRM texts (e.g., Cascio, 1989; Heneman, Schwab, Fossum, & Dyer, 1989) advise organizations to carefully monitor and track the effectiveness of the recruiting sources that they utilize. However, Rynes and Boudreau (1986) surveyed Fortune 1000 firms and found that only 7% reported that they tried to track the relative performance levels of employees recruited through different sources. Some research exists that suggests that informal recruiting sources yield higher quality or higher performing employees than formal recruiting sources (Breaugh, 1981; Kirnan, Farley, & Geisinger, 1989). Yet, in any given organizational setting, one would expect that some recruiting sources would be differentially effective. Thus, organizations should benefit from follow-up studies that examine the link between their recruitment practices and post-hire effectiveness.

Item No. 1 “Observes proper guidelines, standards and profiling on selecting teachers to handle core subjects of specialization” (4.06) was rated Moderately Managed by the respondents. It implies that the school heads of the Senior High Schools in Maguindanao Province moderately managed the selection of the teachers. The researcher would recommend to the school heads to adhere the rulings of the civil service in selecting teachers or any position held in the school to avoid jealousy of other teachers who already serve for many years.

Studies have shown that students also apply different combinations of approaches to learning (Entwistle & Entwistle, 2003; Meyer, 2000; Parpala, Lindblom-Ylänne, Komulainen, Litmanen, & Hirsto, 2010). Parpala et al. (2010) explored university students in several disciplines and found four combinations in students' approaches to learning using latent profile analysis: 1) Organised students, 2) Students applying a deep approach, 3) Students applying a surface approach, and 4) Unorganised students applying a deep approach. In the latter profile, students' scores in the deep approach were high but their scores for Organised studying, that is their time management and effort in studying were quite low (Parpala et al., 2010). This combination of a deep approach to learning and unorganised studying has been shown to cause to problems in study progression (Asikainen et al., 2013; Ruohoniemi, Parpala, Lindblom-Ylänne, & Katajivuori, 2010).

Item No. 2 “Establishes profiles and credentials of teachers who handle core subjects.” (4.15) also rated by the respondents as “Moderately Managed”. The same recommendation will carry out by the researcher. If manpower and budget warrant, it is recommended to hire a bookkeeper to handle the credentials and other documents of the teachers.

Teachers are gatekeepers to any top-down teaching innovation or educational reform (Anderson & Helms, 2001; van Driel, Beijaard, & Verloop, 2001). In order to facilitate policy-driven changes in teaching contents and practices, it is beneficial to understand how such innovations diffuse among teachers and how this process can be catalysed. According to the Diffusion of Innovations model by Rogers (2003) – one of the best-known and most widespread models in social sciences – the rate of adopting an innovation among potential adopters follows a normal distribution as a function of time. The initial spreading in a successful adoption process is quick among early adopters or forerunners, and slows down once a majority has adopted the innovation.

Item No. 3 “Facilitates teachers load assignment to handle the core subjects” (3.98) was also rated as “Moderately Managed” by the respondents. Among the 5 indicators, it gained lowest rate as it manifested in the table 7.

A major goal of the academe is to optimize learning, as indicated by the ever growing literature on the factors affecting students' academic performance. In the Philippines, the National Achievement Test (NAT) is conducted regularly to closely monitor the academic performances of the students and to determine if the students are meeting the learning standards (DepEd Memorandum No. 68, s. 2018). The data generated from this standardized test are utilized by the stakeholders who seek to

contribute to the overall improvement of the quality of education. The current system champions student-centered learning but the teachers still remain a dominant element in the education of the students. A student's academic performance is a product of many factors within and out of the school. Among school-related factors, teachers matter the most. Teachers affect student performances and can influence long-term outcomes such as career paths and economic status.

Item No. 4 "Utilizes teacher specializations to handle core subjects and other related tasking" (4.11) also rated as "Moderately Managed" by the respondents. When some teachers were asked, they answered that some of them handle core subjects in which it is not their major of specialization. In this case, it is recommended to the heads of school to let the teachers in the senior high school to handle core subjects that are aligned with their field of specialization.

Although subject-area specialization in elementary schools is conceptually appealing along some dimensions, it does not come without tradeoffs. From the perspective of teacher effectiveness, one potential negative consequence is increased student/teacher ratios and the corresponding weakening of student-teacher relationships. Unlike self-contained classrooms that enable teachers to cultivate strong relationships by focusing on fewer students and spending more time with them, subject-area specialization spreads teachers across more students (Bastian & Fortner, 2020). Because strong student-teacher relationships are an important ingredient in positive student growth (Hegde & Cassidy, 2004), the benefits of specialization may not outweigh the advantages of learning from a general classroom teacher.

Item No. 5 "Utilizes other human resource to handle core subjects in senior high schools as necessary" (4.19) was also rated as "Moderately Managed" by the respondents. According to some other human resources, if they were designated to a certain administrative position must focus on that task only. They might not be effective in handling core subjects if their focus were divided into to different functions in the school as they stated during the interview with them.

Human resource management (HRM) includes all management decisions and practices that affect the employee of an organization (Bhatt and Reddy, 2011). There have been many definitions of human resource management used by different scholars. Daud (2006) defined HRM as a system, policy, and practices that can affect folks that work in an organization. In addition, Shahnawaz and Juyal (2006) defined Human resources management (HRM) as all decisions and practice that influence worker within organizations. De Cieri, et al. (2008, p.5) explained HRM as "the policies, practices and systems that influence employees' behavior". While Hussain and Ahmad (2012) considered HRM to be a system that attempts to realize an active balance between the personal interests of people and their economic added value. Lastly, Burma (2014) viewed HRM is a strategic and clear approach for the organization's most valued assets behind on the employees.

Generally, the overall mean rating under the staffing skills of 4.097 which is interpreted as "Moderately Managed" as perceived by the respondents. These findings reveal that the staffing skills of the school heads of the senior high schools in Maguindanao Province have moderately performing in terms of staffing and responsibilities of the teachers both in academic and other assignments. As a leader should put human resources that suit their field of expertise.

Staffing is broadly defined as the process of attracting, selecting, and retaining competent individuals to achieve organizational goals. Every organization uses some form of a staffing procedure, and staffing is the primary way an organization influences its diversity and human capital. The nature of work in the 21st century presents many challenges for staffing. For example, knowledge-based work places greater demands on employee competencies; there are widespread demographic, labor, societal, and cultural changes creating growing global shortfalls of qualified and competent applicants; and the workforce is increasingly diverse. A survey of 33,000 employers from 23 countries found that 40% of them had difficulty finding and hiring the desired talent (Manpower Inc., 2006), and approximately 90% of nearly 7,000 managers indicated talent acquisition and retention were becoming more difficult (Axelrod, Handfield-Jones, & Welsh, 2001).

These challenges might lead one to think that organizational decision makers recognize staffing as a key strategic opportunity for enhancing competitive advantage. Because talent is rare, valuable, difficult to imitate, and hard to substitute, organizations that better attract, select, and retain this talent should outperform those that do not (Barney & Wright, 1998). Yet surprisingly, a study by Rynes, Brown, and Colbert (2002) found the staffing domain demonstrated the largest differences between academic findings and the beliefs of managers. This means that, although staffing should be one of the most important strategic mechanisms for achieving competitive advantage, organizational decision makers do not understand staffing or use it optimally. Given that the war for talent is very real and relevant to organizations around the globe, it is critical that organizations and organizational scholars recognize the value of staffing.

However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals' knowledge of pupils' rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads' knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

Eberwein (2008) initiated one of the largest studies in education law surveying 8,000 secondary school principals using the Principals' Education Law Survey developed by Militello, Schimmel, and Eberwein (2009). The results demonstrated an insufficient knowledge of the principals relating to the rights of students and teachers with a correct response rate of 65.27% to the 14 items on students' rights

and 54.12% to the 20 items on teachers' rights.

Militello, Schimmel, and Eberwein (2009) conducted another study of 493 participants using their Principals' Educational Law Survey of 34 true-false questions on students' and teachers' rights. The results indicated a very high percentage of the principals (90%) believing that they could be liable for educational malpractice; about 45% who were unaware that schools have the right to impose strict dress codes; and about 50% who did not know about their Family Educational Rights and Privacy Act.

In the Philippine context, limited studies have been conducted to expose the literacy of school administrators.

In a case study involving 93 school principals from Cagayan de Oro City, Brooks and Sutherland (2014) found the need for these leaders to put student needs above all others and approach student support from a holistic perspective, thereby suggesting for professional development opportunities to be given to the teachers. Sindhvad (2009), however, found in his study involving 364 Filipino principals that support of these leaders largely depends on their belief of ensuing changes in instruction, job satisfaction, and their time and level of control.

Directing Skills

Table 8. *Mean Matrix on Management and Managerial Skills of School Heads in terms of Directing Skills n = 126*

Indicators	Mean	SD	Description
B. Directing Skills			
The School Heads are:			
1. Applies gradual tasking for mastery on Core subjects on specialization.	4.19	.666	Moderately Managed
2. Gives directs feedback to teachers Towards improving teaching performance.	4.19	.756	Moderately Managed
3. Gives directive to teachers through Letter of memorandum.	4.17	.746	Moderately Managed
4. Identifies everything that must be done During the day.	4.11	.660	Moderately Managed
5. Gives proper instruction to subordinates On their load assignments and other Ancillary works.	4.20	.704	Moderately Managed
Overall Mean	4.171	.565	Moderately Managed

Table 8, "Mean Matrix on Management and Managerial Skills of School Heads in terms of Directing Skills" has obtained a grand mean of 4.171 interpreted as Moderately Managed. This reveals that the school heads do not have absolute power to give directions to teachers due primarily for reasons that still teachers are succumbed by the traditional and cultural practices. Technical skill encompasses the specialized knowledge, tools and techniques that leaders utilize to accomplish tasks.

Organizational success is dependent on effective leadership. Behavior is often recognized as one of the most influential variables in leadership. Aside from leader conduct, which has been proven to be an important predictor of leadership effectiveness in the literature, age is also thought to be an important determinant of leadership effectiveness (Boerrigter, 2015). The age of a school leader is one of the most important demographic elements concerning effectiveness, based on early trait theories. However, based on Boerrigter's (2015) study,

there is no significant association between a leader's age and transactional or transformational leadership. His study disclosed that age does not influence a leader's management effectiveness.

The management of an organization is not a straightforward task. It requires a vast array of skills and knowledge. Nevertheless, management inspires individuals by arranging and managing them to accomplish the activities that will assist the organization in achieving its objectives (Memisoglu, 2015). From 1909 to 2001, Tanz (2003) presented a brief management

history. Despite all the progress, he believes that some theorists may be able to uncover the secret to managing in the future century. On the other hand, Jayne and Dipboye (2004) found that an organization must devote significant resources to a variety of other diversity-related initiatives,

such as dedicated diversity management staff, workplace programs, and benefits such as flexible work arrangements, domestic

partner benefits, corporate-sponsored employee affinity groups, and other programs aimed at attracting and retaining a diverse workforce.

In today's world, no manager will be effective unless they have basic management skills (Ibay & Pa-alisbo, 2020). To put it another way, managers must understand the dynamics of their workplace. Management that analyzes effective communication networks and develops human abilities, such as strengthening managers' communication, leadership, and management skills and defining the link between them, can improve the degree of communication, according to them. School principals should routinely incorporate school workers in the decision-making process with continuous communication to increase their dedication and attention to school goals and objectives. Akinfolarin and Ehinola (2014) emphasized that at all levels of education, there must be effective communication between instructors, students, and school officials both inside and outside the school in order to achieve goals. The inclusion of an effective information and communication system in school administration will assist in aligning teachers' and students' goals and objectives with those of the school, encouraging them to enhance the teaching and learning process (Victor, 2017).

Item No. 1 “Applies gradual tasking for mastery on core subjects of specialization” (4.19) was rated by the respondents as “Moderately Managed”. It implies that the school heads of the senior high schools in Maguindanao Province moderately applied the gradual tasking for the teachers for the mastery of the core subject based on their educational qualification and specialization.

Education systems represent the interactions between teachers, students, technologies, lectures, classrooms, etc. to provide educational services. The goal of education is to develop the knowledge, the skills, and the character that will allow people to be accountable, to be able to work, and to participate to the well-being of the society. In addition, the purpose of education should be developed based on the need of society. Multitasking means treating competing requests of various tasks. A task is known as “a distinct work activity carried out for a distinct purpose”. Multitasking includes taking tasks in parallel or rotating between tasks (i.e., quick sequences). The main point in multitasking is that it interrupts the task, resulting in a degradation of main task performance

Item No. 2 “Gives direct feedback to the teachers toward improving teaching performance” (4.19) were also rated by the respondents as “Moderately Managed”. It means that the management of giving direct feedback to the teachers for their instructional improvement was moderately managed by the school heads in the senior high schools in Maguindanao Province.

Many individuals have expressed concern regarding teacher effectiveness. These concerns have implications for teacher preparation at both preservice and inservice levels (Greenwood & Maheady, 1997; Lavelly, Berger, & Fulmar, 1992; Lindsey & Strawderman, 1995; Maheady, Mallette, & Harper, 1996). Of particular interest to those involved in teacher preparation, is that children are failing in school at least in part because some teachers are inadequately prepared to teach (Greenwood & Maheady, 1997). Indeed, almost all preservice teachers who complete the necessary coursework make it through student teaching and become certified teachers, regardless of their ability. Failing grades in student teaching are unheard of in most universities. In fact, 80% of schools and colleges of education fail 1% or fewer of their student teachers, including 15% that never fail any (Sudzina & Knowles, 1993). Additionally, of graduates who go on to teach, 10% are considered incompetent (Lavelly et al., 1992). Because almost all preservice teachers eventually become inservice teachers, regardless of ability, teacher educators must identify and encourage teachers to use effective teaching practices early and consistently.

Item No. 3 “Gives directives to the teachers through letter of memorandum” (4.17) were also rated by the respondents as “Moderately Managed”. It implies that the school heads in the senior high schools were utilized letter of memorandum when giving directives to their teachers with moderation.

Directive speech acts are regarded as one function of communication (Yule, 1996: 54). People use directive speech acts to direct someone to something. Directives are speech act that is frequently used in a classroom interaction. The teachers use it to make the students do something. The types of directive speech act used are command, order, advice, request, warning, and so forth (Searle, 1969).

Yule (1996: 23) defines directive speech acts as those kinds of speech acts that speakers use to get someone else to do something. They express what the speaker wants. They are commands, orders, requests, and suggestions. They can be formed as positive and or negative sentences. In using a directive, the speaker attempts to make the world fit the word (via the hearer).

Item No. 4 “Identifies everything that must be done during the day” (4.11) was rated by the respondents as “Moderately Managed” again. It means that the school heads moderately managed the activities of the teacher everyday and give account to the accomplishments of each teacher in a day.

A limited number of studies on the attitudes of teachers towards inclusion have been done in South Africa (Bothma 1997; Harris 1998; Wessels 1997; Swart, Pettipher, Engelbrecht, Eloff, Oswald, Ackerman & Prozesky 2000, Bothma, Gravett & Swart 2000), but none have focused on the actual preparedness of teachers or on an extensive sample of respondents from all districts of a South African province. This investigation, jointly conducted by Vista University and the Free State Department of Education, took place from the end of 1999 to the beginning of 2000.

Item No. 5 “Gives proper instruction to subordinates on their load assignments and other ancillary works” (4.20) were also rated again by the respondents as “Moderately Managed”. It implies that the management of giving proper instruction to the teachers on their responsibilities assigned to them by the school heads were moderately managed.

Generally, directing skills of the school heads in the Senior High Schools in Maguindanao Province was moderately managed as it reveals in the overall mean rating of 4.171 corresponding to descriptive mean rating of Moderately Managed.

Power differences are thought to interfere with superiors' interaction with subordinates. However, it is also argued that superiors with considerable power are most supportive of their subordinates. To explore these opposing positions, 90 undergraduates became managers with either high or low power who believed their goals were cooperatively, individualistically, or competitively related to their subordinate. Results support the hypothesis that social context affects how superiors use their power to interact with subordinates. High- and low-power superiors in cooperation had positive expectations, interacted constructively, restated the task, responded to requests for assistance, and developed a positive relationship compared to high- and low-power superiors in individualistic and competitive situations. In addition, only the high-power superiors in cooperation used their expertise to give direct aid to the subordinate.

However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals' knowledge of pupils' rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads' knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

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Controlling Skills

Table 9 shows the response of the respondents in relation to Controlling Skills of the school heads in the Senior High Schools in Maguindanao Province.

Item No. 1 “Identifies barriers to changes” has a mean of (4.06) and was rated by the respondents as “Moderately Managed”. It implies that the school heads of the senior high schools in Maguindanao Province were moderately managed the identification of the barriers for the changes of the school from better to best.

As a teacher in the Foundation Phase1, I have experienced a multiplicity of challenges in the teaching and learning situation; one of which is the inability to accurately identify barriers to learning experienced by learners. Many a times, it has been difficult to say with certainty which phenomenon is linked to educational challenges, for example, in language development, reading, writing, attention, perception and social relationships. The further down the grades that one teaches, the more difficult it is to identify barriers to learning. These barriers to learning also impact on the development of some learners.

Item No. 2 “Decides based on the maximum benefits to a given situation” (4.24) was rated by the respondents as “Highly Managed”. It means that the school heads of the senior high schools in Maguindanao Province was effectively and efficiently managed the decision making on the programs of the schools that were most beneficial or in the state of maximum benefits to the schools.

Formal education has already been identified as a fundamental resource in addressing health and social inequalities (Hatch, 2005; Link & Phelan, 1995; Mirowsky & Ross, 2003). Education and cognition, undoubtedly interrelated, potentially lead individuals to environments or behaviours that protect health. Cognitive function contributes to health inequalities through a variety of indirect pathways (Whalley & Deary, 2001) and provides a foundation for skilled instrumental activities of daily living and goal-directed behaviors. These activities include the learning and retention of information; the understanding of the representation of everyday surroundings and activities, specific task instructions, complex abstract knowledge, calculation of dimensions (e.g., time, age, and

quantity); and the organization of attention processes to maintain focus yet enable multitasking. Thus, it is important to consider the potential for wider benefits of adult learning in understanding the impact of education on cognitive functioning in mid-adulthood. Adult education has received far less attention than formal education with respect to its importance to cognitive function, over and above previous educational attainment.

Item No. 3 “Adheres on division memorandum and DepEd orders as guide in decision making” has a mean of (4.21) and described as “Highly Managed”. It implies that the school heads in the senior high schools in Maguindanao Province decision making was well managed and see to it that will not contradict with the law. It implies further that all decision making happen in the senior high schools in Maguindanao Province was in consonance with the DepEd orders as well as Division Memorandum orders.

A study to investigate the adherence to quality management procedures in universities was carried out by Bitange (2007) and Bitange, Magutu, Mbeche, Nyamwange, Onger and Ombati (2010) at the University of Nairobi. The study found that quality management was extensively applied at the university academic processes and to a very great extent defined its processes to ensure its academic and educational products meet the Commission for University Education (CUE) regulatory requirements. The study recommended formulation of new ideas to respond to the ever changing environment in higher education. The study only used one university, used only quantitative method of collecting data and focused more on the quality management of the academic processes in the university. The current study used five universities, used both qualitative and quantitative methods in collecting data and specifically focused on adherence to administrative procedures and guidelines of setting examinations.

Item No. 4 “Assists teacher – subordinates to creatively apply their ideas in performing their duties” has a mean of (4.25) and also described as “Highly Managed”. It implies that the school heads of the senior high schools in the province of Maguindanao was give an assistance to the teachers as well as the subordinates for them to be independently apply their sense of creativity in performing their duties and responsibilities.

Various terms are used in order to define the difficulties faced in mathematics learning/teaching. These are the terms that will be used in this paper: difficulty, misconception, and error. The terms are used mostly interchangeably. Difficulty is a comprehensive term used herein to describe the difficulties faced by the students in mathematics learning in general (Bingölbalı & Özmantar, 2009). Taken in this sense, the term difficulty falls short of defining and solving the learning difficulties of students. Because of the above-mentioned characteristic of the term difficulty, the difficulties faced by the students are handled primarily with the use of the term misconception. Misconception is defined as “perceptions or conceptions which are far from the meaning agreed upon by the experts” (Zembar, 2008). In other words, misconception can be defined as known perceptions that diverge from the views of experts in a field or subject matter (Hammer, 1996).

Item No. 5 “Provides climate that encourages understanding and solidarity” has a mean of (4.26) and also described as “Highly Managed”. In this case, providing a climate that encourages every member of the organization to better understanding and solidarity among them is inevitable mandate of every leader. Based on the finding, the school heads of the senior high schools in Maguindanao province were highly managed and facilitate the provision of climates or venues that promotes understanding and solidarity among the members of the organization, such as teachers and other members in the academe.

We propose an empathy-sustainability hypothesis to consolidate models of human-environment relations with empathy as a route to human action. In essence, the empathy-sustainability hypothesis proposes that empathy – through processes of perspective taking and emotional connection - is a pre-requisite for sustainable interactions with the biosphere. In this formulation, empathy re-connects humans and environment, and provides motivations for pro-environmental behavior and action. We contend that empathy with the non-human (i.e. ‘natural’) world can provide a basis for overcoming the conventional dualism between humans and nature, potentially encouraging a more interdependent mode of engagement with the environment. Building these connections is widely advocated in broad literatures on environmentalism, environmental philosophy and conservation, articulated for example in Leopold’s Land Ethic and Wilson and Kellert’s Biophilia, and more recently in discussions about the beneficial effects of nature on human wellbeing (Leopold, 1949; Wilson 1984; Kellert and Wilson 1995; Mayer et al., 2009).

In general, the controlling skills of the school heads of the senior high schools in the province of Maguindanao has an overall mean of 4.205 and described as “Highly Managed”. This means that school heads were really sincere and dedicated in their delivery of service.

However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals’ knowledge of pupils’ rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads’ knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

Eberwein (2008) initiated one of the largest studies in education law surveying 8,000 secondary school principals using the Principals’ Education Law Survey developed by Militello, Schimmel, and Eberwein (2009). The results demonstrated an insufficient knowledge of the principals relating to the rights of students and teachers with a correct response rate of 65.27% to the 14 items on students’ rights and 54.12% to the 20 items on teachers’ rights.

Militello, Schimmel, and Eberwein (2009) conducted another study of 493 participants using their Principals' Educational Law Survey of 34 true-false questions on students' and teachers' rights. The results indicated a very high percentage of the principals (90%) believing that they could be liable for educational malpractice; about 45% who were unaware that schools have the right to impose strict dress codes; and about 50% who did not know about their Family Educational Rights and Privacy Act.

In the Philippine context, limited studies have been conducted to expose the literacy of school administrators.

In a case study involving 93 school principals from Cagayan de Oro City, Brooks and Sutherland (2014) found the need for these leaders to put student needs above all others and approach student support from a holistic perspective, thereby suggesting for professional development opportunities to be given to the teachers. Sindhvad (2009), however, found in his study involving 364 Filipino principals that support of these leaders largely depends on their belief of ensuing changes in instruction, job satisfaction, and their time and level of control.

Organizing Skills

Table 9. *Mean Matrix on Management and Managerial Skills of School Heads in terms of Controlling Skills n=126*

Indicators	Mean	SD	Description
D. Controlling Skills The School Heads are:			
1. Identifies barriers to change.	4.06	.735	Moderately Managed
2. Decides base on the maximum benefits To a given situation.	4.24	.731	Highly Managed
3. Adheres on Division Memorandum and DepEd orders as guide in decision making.	4.21	.730	Highly Managed
4. Assists teacher – subordinates to Creatively apply their ideas in Performing their duties and functions.	4.25	.619	Highly Managed
5. Provides climate that encourages Understanding and solidarity.	4.26	.635	Highly Managed
Overall Mean	4.205	.568	Highly Managed

Table 10 shows, "Mean Matrix of Managerial Skills in terms of Organizing Skills of the school heads" has a grand mean rating of 4.205 described as highly managed. This implies that school heads have already established networks and linkages and be able to coordinate activities of the subordinates to be able to maximize monitoring and be able to supervise them effectively.

According to The Philippines DepEd Memorandum No. 50, s. 2020 entitled DepEd Professional Development (PD) Priorities of Teachers and School Leaders for SY 2020 – 2023, the school leaders must undergo the different professional development in support of the operationalization of the school considering COVID-19. Here are the following Domains: 1. Leading Strategically; 2. Managing School Operations and Resources; 3. Focusing on Teaching and Learning; 4. Developing Self and Others; and 5. Building Connections.

In periods of adversity, good leaders can lead with their eyes wide open. Any politicians, on the other hand, are so risk-averse that they refuse to see the facts in dangerous circumstances. Others tend to be so cynical about every turn of events that they overlook prospects and development opportunities. But a leader who pays attention to relevant data recognizes both opportunities and harbingers of disaster. Such a leader monitors signals of flagging resilience in his or her organization and shores resilience up (Allison, 2016).

In the research conducted by Cunningham and Cordeiro (2015), they believe that the "leader needs to be prepared to deal with the inevitable social, cultural, economic, technological, bureaucratic, and political obstacles that can block improvements efforts" (p. 137). On the contrary, Greenfield (2016) disagreed that an effective administration is not possible without efficient and effective leadership, and if school leadership is to be successful, it must deal with the five demands: moral, social, instructional, managerial, and political. Researchers concluded that effective schools hinge on the performance of the principal (Aitken, 2015).

Finally, Napire (2019) discussed in his study that the functions of the quality management skills of the principals' leadership practices are instructional directives, resiliency in stress management, management of conflicts, and establishing effective functional teams. The school leaders must practice these skills.

The present study is related to the study of Napire (2019) and Perez (2015), in which they both deal with the Management Practices

and the Administrative Disposition of the School Head. The aim of this analysis was to gather information, analyze it, and address it in a way that would assist school principals and policymakers in developing new strategies and making appropriate decisions for the good of the school district and students. Henceforth, the researcher hoped that through the results of this study, the school principals and DepEd Officials might have additional knowledge and eventually bridge the identified gaps in the management aspects of the school being supervised.

Item No. 1 “Objectively gives timely feedback about progress toward goals” (4.21); and Item No. 2 “Assigns subordinates to take responsibility to their works” (4.21) were rated by the respondents as “Highly Managed”. These implies that the school heads in the senior high schools in the Province of Maguindanao were “Highly Managed” the giving feedback on the progress toward goals of the organization and the assigning a subordinates to take the responsibility of their works. It implies further that the school heads delegates some task to the deserving teachers assigned for that particular activity.

Responsibility assignment modelling is concerned with developing a picture of how the responsibilities in a socio-technical system are distributed across the different automated elements and actors in that system. At this stage, we are not concerned with the details of the responsibilities themselves, nor with what the actors in the system have to do to discharge these responsibilities. Rather, a responsibility model presents a succinct picture of ‘who is responsible for what’ that can be used to identify responsibilities that have not been assigned, responsibilities that have been misassigned and actors in the system who may be overloaded with responsibilities. We argue that these models have a role to play in identifying sources of undependability in a system. They can be used to help identify requirements that are inconsistent with the responsibility structures and to design robust and reliable operational processes.

Item No. 3 “Empower teachers to make decisions” has a mean of (4.10) and described as “Moderately Managed”; and Item No. 4 “Sets specific goals for teachers to accomplished rather than general goals” has a mean of (4.16) and described as “Moderately Managed”. It implies that both the empowerment of teachers to make decisions, and setting specific goals for teachers to accomplish instead of general goals was managed by the school heads by moderation.

Teaching is indeed a complex profession; it is also a challenging one in which teachers have to meet various social and intellectual demands. Successful teachers are not simply responsible for transferring knowledge, they must transfer it effectively and successfully, and for that reason alone, they should organise classrooms, implement effective classroom pedagogy and work cooperatively with a diversity of students and colleagues (McCaughtry, Cothran, Kulinna, Martin and Faust, 2005). Despite the significant role of teachers in the classroom, many Indonesian teachers have been found to lack teaching competence (Azra, 2002). This has been observed by Bjork (2005) and ascribed to the long tradition of teacher-centred teaching and rote learning in the Indonesian classroom.

Item No. 5 “Organizes different committees to handle issues and concerns that may arise in school” was gained a mean rating of (4.25) corresponding to the descriptive mean rating of “Highly Managed”. It implies that the school heads of the senior high schools in Maguindanao Province well managed the organization of different committees that handles different issues and concerns of the school.

Generally, Organizing Skills of the school heads in senior high schools in Maguindanao province were “Moderately Managed” as it was reflected in the overall mean rating of (4.186). In these findings, the researcher can recommend that the school heads of senior high schools must enhance their skills in the field of organizing the programs of the school.

However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals’ knowledge of pupils’ rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads’ knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

Eberwein (2008) initiated one of the largest studies in education law surveying 8,000 secondary school principals using the Principals’ Education Law Survey developed by Militello, Schimmel, and Eberwein (2009). The results demonstrated an insufficient knowledge of the principals relating to the rights of students and teachers with a correct response rate of 65.27% to the 14 items on students’ rights and 54.12% to the 20 items on teachers’ rights.

Militello, Schimmel, and Eberwein (2009) conducted another study of 493 participants using their Principals’ Educational Law Survey of 34 true-false questions on students’ and teachers’ rights. The results indicated a very high percentage of the principals (90%) believing that they could be liable for educational malpractice; about 45% who were unaware that schools have the right to impose strict dress codes; and about 50% who did not know about their Family Educational Rights and Privacy Act.

In the Philippine context, limited studies have been conducted to expose the literacy of school administrators.

In a case study involving 93 school principals from Cagayan de Oro City, Brooks and Sutherland (2014) found the need for these leaders to put student needs above all others and approach student support from a holistic perspective, thereby suggesting for professional development opportunities to be given to the teachers. Sindhvad (2009), however, found in his study involving 364 Filipino principals that support of these leaders largely depends on their belief of ensuing changes in instruction, job satisfaction, and their time and level of control.

Table 10. *Mean Matrix on Management and Managerial Skills of School Heads in terms of Organizing Skills n=126*

Indicators	Mean	SD	Description
E. Organizing Skills			
The School Heads are:			
1. Objectively gives timely feedback about Progress toward goals.	4.21	.661	Highly Managed
2. Assigns subordinates to take Responsibility to their works.	4.21	.570	Highly Managed
3. Empower teachers to make decisions.	4.10	.679	Moderately Managed
4. Sets specific goals for teachers to Accomplish rather than general goals.	4.16	.638	Moderately Managed
5. Organizes different committees to handle Issues and concerns that may arise in school.	4.25	.715	Highly Managed
Overall Mean	4.186	.515	Moderately Managed

Table 11, “Mean Matrix of Managerial Skills in terms of Organizing Skills of the school heads” has a grand mean rating of 4.186 described as moderately managed. This implies that school heads have already established networks and linkages and be able to coordinate activities of the subordinates to be able to maximize monitoring and be able to supervise them effectively. According to The Philippines DepEd Memorandum No. 50, s. 2020 entitled DepEd Professional Development (PD) Priorities of Teachers and School Leaders for SY 2020 – 2023, the school leaders must undergo the different professional development in support of the operationalization of the school considering COVID-19. Here are the following Domains: 1. Leading Strategically; 2. Managing School Operations and Resources; 3. Focusing on Teaching and Learning; 4. Developing Self and Others; and 5. Building Connections.

In periods of adversity, good leaders can lead with their eyes wide open. Any politicians, on the other hand, are so risk-averse that they refuse to see the facts in dangerous circumstances. Others tend to be so cynical about every turn of events that they overlook prospects and development opportunities. But a leader who pays attention to relevant data recognizes both opportunities and harbingers of disaster. Such a leader monitors signals of flagging resilience in his or her organization and shores resilience up (Allison, 2016). In the research conducted by Cunningham and Cordeiro (2015), they believe that the “leader needs to be prepared to deal with the inevitable social, cultural, economic, technological, bureaucratic, and political obstacles that can block improvements efforts” (p. 137). On the contrary, Greenfield (2016) disagreed that an effective administration is not possible without efficient and effective leadership, and if school leadership is to be successful, it must deal with the five demands: moral, social, instructional, managerial, and political. Researchers concluded that effective schools hinge on the performance of the principal (Aitken, 2015).

Finally, Napire (2019) discussed in his study that the functions of the quality management skills of the principals’ leadership practices are instructional directives, resiliency in stress management, management of conflicts, and establishing effective functional teams. The school leaders must practice these skills.

The present study is related to the study of Napire (2019) and Perez (2015), in which they both deal with the Management Practices and the Administrative Disposition of the School Head. The aim of this analysis was to gather information, analyze it, and address it in a way that would assist school principals and policymakers in developing new strategies and making appropriate decisions for the good of the school district and students. Henceforth, the researcher hoped that through the results of this study, the school principals and DepEd Officials might have additional knowledge and eventually bridge the identified gaps in the management aspects of the school being supervised.

Item No. 4 “Offers services and resources for enrichment to teachers seeking opportunities to explore field of specialization” has a mean of (4.17) described as “Moderately Managed”. In this finding, the School Heads in the Senior High Schools in Maguindanao Province were offers some services for the enrichment and development of the teachers teaching the core subjects and give a chance to explore their (teachers) field of specialization. It implies further that the School Heads offers the resources of the Item No. 1 “Uses varied types of monitoring and evaluation tools in evaluating teachers’ performance and progress” (4.29) were rated by the respondents as “Highly Managed”. It implies that the monitoring and evaluating process employed by the School Heads in the Senior High Schools in Maguindanao Province have utilized different varieties and managed well.

Item No. 2 “Uses statements that trigger the needs and to explore the information” (4.17) were rated by the respondents as “Moderately Managed”. This means that the School Heads of the Senior High Schools in Maguindanao Province were managed in moderation the selection of statements that leads to the discovery and exploring the necessary information for the teachers.

Item No. 3 “Provides activities leads to advancement and guidance of the teachers” has a mean of (4.17) and described as “Moderately High”. This implies that school heads have initiate enrichment of the teachers in seeking opportunities to explore their field of specialization.

Educational reform developments in Canada and elsewhere are setting bold goals for student learning. Recent research literature suggests that while many factors contribute to achieving these goals, what teachers know and are able to do is one of the most important factors influencing student learning (Darling-Hammond & Sykes, 1999; Fullan, Hill & Crevola, 2006; Wilson, Floden & Ferrini-Mundy, 2001). Teachers are the ones responsible to work creatively with their students, to translate and shape curricular goals and theoretical notions into effective classroom and school-wide practices, and to provide an environment for effective learning. Current literature also stresses that the act of teaching is becoming increasingly complex and that highly competent teachers continue to learn, are adaptive, build up a sophisticated pedagogical repertoire, and are able to apply a range of practices for varying purposes that incorporate and integrate different kinds of knowledge, used in various combinations flexibly and fluently (Bransford, DarlingHammond & LePage 2005; Cole & Knowles, 2000; Darling-Hammond, 1998; Turner-Bisset, 2001).

Finally, Item No. 5 “Encourages and praises teachers in their progress in teaching performance” (4.27) were rated by the respondents as “Highly Appreciated”. It implies that the School Heads in the Senior High Schools in Maguindanao Province give due encouragement and appreciations to the teachers’ progress and development in teaching performance. However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals’ knowledge of pupils’ rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads’ knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

Eberwein (2008) initiated one of the largest studies in education law surveying 8,000 secondary school principals using the Principals’ Education Law Survey developed by Militello, Schimmel, and Eberwein (2009). The results demonstrated an insufficient knowledge of the principals relating to the rights of students and teachers with a correct response rate of 65.27% to the 14 items on students’ rights and 54.12% to the 20 items on teachers’ rights. Militello, Schimmel, and Eberwein (2009) conducted another study of 493 participants using their Principals’ Educational Law Survey of 34 true-false questions on students’ and teachers’ rights. The results indicated a very high percentage of the principals (90%) believing that they could be liable for educational malpractice; about 45% who were unaware that schools have the right to impose strict dress codes; and about 50% who did not know about their Family Educational Rights and Privacy Act.

In the Philippine context, limited studies have been conducted to expose the literacy of school administrators. In a case study involving 93 school principals from Cagayan de Oro City, Brooks and Sutherland (2014) found the need for these leaders to put student needs above all others and approach student support from a holistic perspective, thereby suggesting for professional development opportunities to be given to the teachers. Sindhvad (2009), however, found in his study involving 364 Filipino principals that support of these leaders largely depends on their belief of ensuing changes in instruction, job satisfaction, and their time and level of control.

Table 11. *Mean Matrix on Management and Managerial Skills of School Heads in terms of Monitoring Skills n = 126*

Indicators	Mean	SD	Description
E. Monitoring Skills			
The School Heads are:			
1. Uses varied types of monitoring and Evaluation tools in evaluating teachers’ Performance and progress.	4.29	.591	Highly Managed
2. Uses statements to trigger the needs and Explore the information.	4.17	.570	Moderately Managed
3. Provides activities leads to advancement And guidance of teachers.	4.17	.629	Moderately Managed
4. Offers services and resources for Enrichment to teachers seeking Opportunities to explore field of specialization.	4.17	.666	Moderately Managed
5. Encourages and praises teachers in their Progress in teaching performance.	4.27	.650	Highly Managed
Overall Mean	4.211	.527	Highly Managed

Table 12, “Mean Matrix on Management and Managerial Skills of School Heads in terms of Monitoring Skills” has a grand mean of 4.211 described as highly managed. This results opines that the school heads were able to establish policy guidelines on the manner of monitoring to effectively implement efficiency of teachers and be able for the teachers to deliver the mandates of teaching to give quality education to students.

Monitoring represents a whole system, fulfilling a number of functions. The aspects of monitoring which distinguish it from similar pedagogical and psychological processes are continuity of data collection, diagnostic character of its processes; informative character; scientific character of the applied criteria and conclusions; feedback after correction of the process screened (Gorb, 2003; Kovalenko, 2012; Shilibekova, 2011).

Monitoring is an activity that involves continuous and systematic checking and observing of a program or a project. Evaluation on the other hand is judging, appraising or determining the worth, the value and quality of a program. It involves comparing the present situation with the past in order to find out the extent to which the laid down objectives have been achieved (Handbook for inspection of educational institutions, 2000).

Monitoring and evaluation is done in the education sector to monitor programs like quality of education. In education two activities take place these are teaching done by the teachers and learning by the students. Teachers who teach in secondary schools are usually degree or diploma holders in education. During training the teachers go through methodologies of teaching and are therefore well versed with good teaching practices. The principal is responsible for monitoring and evaluation at the school level to ensure effective teaching and learning is going on (Williams, 2000).

The following can serve as objects of monitoring at schools: the educational process (Shatalov, 2008; Coates, 2010); academic progress of pupils, their learning and vocational-education activities (Lenske, 2016); professional activity of pedagogues and their development (Buldygina, 2007); formation of a teaching collective (Turgunbayeva & Tikhomirova, 2006).

When effective teaching is done it translates to effective learning in students and this reflects as good performance in KCSE and other examinations. Monitoring and evaluation started a long time ago, in Western Australia. Prior to 1950's teachers professional development was relatively unknown. By the 1970's teachers professional development started expanding in, 1980 it was a period of rationalization. It was recognized by this time although achieving change in practice, the classroom level was the hallmark of effective professional development. Since then school improvement has been sought through introduction of teacher standards and registration, competency frame works and efforts to transform schools from industrial organization to learning organizations (Fullan, 2001).

However, a study done by Caldwell (1986) which was replicated by Brabrand (2003) 17 years later yielded the same results indicating that school heads only have an average or fair amount of education law knowledge. Both studies surveyed the school principals' knowledge of pupils' rights, teacher/administrator issues, torts, and church/state relations through a 40-item true-false test. Caldwell (1986) also found that the school heads' knowledge of education law has no significant difference with the type of school law preparation, length of administrative experience, and recency of education law training.

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Part III – Teaching Core Subjects Effectiveness

Results on the Teaching – Learning Process Effectiveness and Efficiency were discussed in this portion of the study.

Effectiveness

Table 13, “Mean Matrix on Effectiveness of Teaching – Learning Process Employed by Teachers Teaching Core Subjects” has obtained a grand mean of 4.381 described as highly effective. The findings of the current research revealed that it is a teacher responsibility to ensure regular interaction occurs between the basic human capabilities of a learner and the culturally invented technologies so that it

finally leads to enhancement in their cognitive capabilities. In line with this theory's principles, the use of class interaction, role play and visual simulation to the students in the form of graphs, charts, and newspapers from where information on various business and financial matters challenged their learnings and allowed them to become more creative. In terms of resources, the research found that teachers need to use various resources in the learning process that may include computers, books, smartboard, equipment, artefacts, whiteboard, special speakers, games, computer programs etc. It was evident from the research that the more the lesson is interactive, the more the learners are engaged/motivated to improve their learning experiences. The research also realized that certain teaching methods might be very useful for certain learners which may be flawed for other. Thus, it is recommended to use a blended learning (mixture of online and offline learning) along with experiential learning (cross-age peer tutoring, pro and con grid, prodigy games, mnemonic) which have been very useful in improving the learning experience and reducing the disruptive issues in the classroom from the case study.

Table 13. *Mean Matrix on Effectiveness of Teaching – Learning Process Employed by Teachers Teaching Core Subjects in the Senior High Schools in Maguindanao Province n = 126*

Indicators	Mean	SD	Description
The Teachers are:			
1. Encourages independence in student learning.	4.35	.584	Highly Effective
2. Uses problem – solving techniques.	4.35	.598	Highly Effective
3. Promotes cooperation in group learning.	4.48	.576	Highly Effective
4. Helps students develop effective study Skills and habits.	4.30	.661	Highly Effective
5. Praises more than criticizes students.	4.42	.598	Highly Effective
Overall Mean	4.381	.507	Highly Effective

Most learners in a classroom is the visual learners who best respond to visual learning stimuli. Besides learning from these visual stimuli, visual learners also learn by observing what others do in a learning session. This category of learners learns best when they are given visual learning stimuli like charts, diagrams, pictures, or formulae written on the blackboard. This category of learners is usually creative in applying their learning outcomes, observant in nature and not easily distracted (Arthurs, 2007; Gilakjani, 2012). The third category of learners that is often found in a classroom learning session is the kinesthetic learner. Learners in this category are more comfortable in learning through hands-on approach rather than visual or auditory learning. Thus, they learn best when teachers give them instructions through physical activities.

In most cases, they present their learning outcomes through physical activities too (Leopold, 2012). Nevertheless, from their responses to the questions we also understood that some internal and external factors are at play behind the learning objectives and expected learning outcomes of the students. Due to the positive experience that we have had using this strategy, as well as similar opinions from our colleagues, we recommend that inclusion of practical activities in the lesson can be an integral part of every course and curriculum

Item No. 1 “Encourages independence in student learning” has a mean of (4.35) and described as “Very Effective”. It implies that encouraging students to a self-learning activities and performance task was considered to be as very effective way of Teaching – Learning Process.

In most countries, motivation for school clearly declines throughout school time (Martin, 2009; OECD, 2016; Scherrer & Preckel, 2019) with individual heterogeneity in changes depending on specific motivation constructs across academic domains (Gaspard et al., 2020; Scherrer & Preckel, 2019). Given this undesirable decline and the fact that motivation can be targeted by interventions, motivation has long been a central focus of educational psychology. The influence of motivation on achievement is well-documented (Burnette et al., 2013; Gottfried et al., 2013; Greene & Azevedo, 2007; Valentine et al., 2004). Yet the reverse relation is also often found, as achievement can affect motivation through experiences of success or failure (Garon-Carrier et al., 2016; Guay et al., 2003; Jansen et al., 2013). A common view is that both the “motivation → achievement” and “achievement → motivation” links exist and that motivation and achievement influence each other in a reciprocal manner over time (Huang, 2011; Marsh & Craven, 2006; Marsh & Martin, 2011; Möller et al., 2009).

Item No. 2 “Uses problem – solving techniques” has a mean of (4.35) and described as “Very Effective”. It implies that the problem solving techniques was very effective methods of teaching – learning process in the Senior High Schools in Maguindanao Province.

Problem solving involves memory, attention and perception. These higher cognitive processes are used to search for a solution to a given problem or reach a goal. They differ according to the problem solver’s knowledge, experience and skills (Wang & Chiew in press). Generally, the problem is: (i) identified (the initial state), (ii) represented (actions to reach the goal state), and

(iii) the course of actions to reach the solution (the goal state). Hayes (1978) proposed that the distinction between well-defined and ill-defined problems was the space of possible move sequences given the context in which the problem is set and the information-processing limitations of the problem-solver. In a well-defined problem (e.g. the Tower of Hanoi) the start-state, goal-state, and available operators and constraints are known in advance and heuristics, such as hill-climbing and means-ends analysis, are central to human performance (Simon & Reed 1976).

On the other hand, in ill-defined problems, one or more states and operators may be ill-structured, or not known. Such characteristics define problems faced by project cost estimators in software engineering. Hence in this paper, we focus on ill-defined problem solving. Additionally, we consider expert problem solvers because typically software project cost estimators are experts.

Item No. 3 “Promotes cooperation in group learning” gained the highest mean rating of (4.48) with standard deviation of .576 corresponding also to a descriptive rating of Very Effective. It implies that among the five (5) indicators (methods employed) by the teachers in teaching core subjects in Senior High Schools in Maguindanao Province, it is the most effective. In this finding, it is recommended to the teachers to employ in their methods and strategies in teaching the cooperation or group cooperative learning.

The room is buzzing with voices. Compliments are being given, questions are being asked, suggestions for new ideas are being expressed. This is not a room full of adults, as one might guess. Surprisingly, these are first and second graders at school. As they work, the students are learning necessary social skills to get along. Some of the children are quite similar to themselves while others are very different. Traditional classrooms usually have one leader, the teacher, members are grouped homogeneously; each individual is responsible for his own project and accomplishments; and social skills occur naturally, usually with the teacher intervening to show students how they should act. Cooperative classrooms divide leadership among peers with everyone having an opportunity at some point; members are arranged heterogeneously; individuals are responsible for contributing to the group experience; and social skills are an integral and important part of the instruction (Miller, 1989).

Item No. 4 “Helps students develop effective study skills and habits” has a mean of (4.30) described as “Very Effective”. It implies that guiding the learners in study skills and habits is a good strategy employed by the teachers since it is very effective way that you can help your students.

Many researches define the concept of study skills. Some of the more common study skills strategies students used are motivational techniques, time management skills, note taking skills, test taking skills, organizational skills, and study habit skills (Haynes, 1993)¹. Other examples of study skills that are already applied in special course are motivation, critical thinking, dictionary or root words, graphic skills, note taking, library skills, logic, outlining or mapping, PQ5R, test taking, and time management. This course is called Dynamics of Effective Study which focuses on those eleven essential knowledge acquisition skills. All those skills are included in students’ study skills. It means that there are no specific skills which define as study skills. A study skill is study strategy.

Finally, Item No. 5 “Praises more than criticizes students” has a mean of (4.42) and described as “Very Effective”. It implies that praising the achievements of the students was very effective strategy that may lead to the learning of the students rather than criticizing them that may leads them for failure and even leads them to stop their studies.

One of the seminal studies on praise was conducted by Brophy (1981). He argued that praise has been “seriously oversold” (p. 19). Brophy found that teacher praise was often infrequent, non-contingent, global rather than specific, and determined more by the students’ need for praise than by the quality of student conduct or achievement. He argued that teacher praise is often reactive to and under the control of student behaviour, dependent on the teacher’s personality and style and the students’ personality characteristics.

Thus “teacher praise often was not deliberate reinforcement but instead a spontaneous reaction to student behaviour, elicited by the quality of student performance or by students bid for praise” (Brophy, 1981, p. 11). He concluded that rather than just assuming its effectiveness, teachers who wished to praise effectively would have to assess how individual students respond to praise, and in particular, how they process its meaning to make sense of their ability, effort and outcome of their effort - to praise well, rather than to praise often.

Generally, the teaching learning process employed by the teachers in the Senior High Schools in Maguindanao Province were rated by the respondents as Very Effective as it indicated in the overall mean rating of 4.381 with a standard deviation of .507 corresponding to a descriptive mean rating of “Very Effective”.

A Pearson product – moment correlation was conducted to examine the relationships of the managerial skills such as Planning Skills, Staffing Skills, Directing Skills, Controlling Skills, Organizing Skills, and Monitoring Skills with the Effectiveness of Teaching – Learning Process employed by the teachers in teaching core subjects in the Senior High Schools in Maguindanao Province.

Table 1 shows the results on the Pearson product – moment correlation. As shown in the table 13, the first three strongly positively related to effectiveness were: Monitoring Skills with Pearson $r = .644^{**}$ at the .01 level of significance; followed by Organizing Skills with Pearson $r = .578^{*4}$ at the .01 level of significance; and Controlling Skills with Pearson $r = .471^{**}$ at the .01 level of significance.

It implies that among the six indicators of managerial skills, these three were the strongest relationship with the effectiveness of Teaching – Learning Process employed by the teachers teaching core subjects at Senior High Schools in Maguindanao Province

although all the six managerial skills included in this study were strongly related to the Teaching–Learning Process Effectiveness.

Based on these findings, the null hypothesis is rejected because all the six managerial skills included in this study has strong relationship with the effectiveness and efficiency of teaching core subjects in Maguindanao Province.

Table 14. *Correlation for Effectiveness of Teaching-Learning Process Employed by Teachers Teaching Core Subjects at Senior High Schools in Maguindanao Province*

Managerial Skills	Efficiency	Efficacy
Planning Skills		.447**
Staffing Skills		.418**
Directing Skills		.315**
Controlling Skills		.471**
Organizing Skills		.578**
Monitoring Skills		.644**

Note: ** Correlation is statistically significant at the .01 level.(2 tailed)

Conclusions

It is found from the personal reflection and class observation that for managing the behavior of individuals or groups different strategies may have to be used such as questioning, role play, rewards, punishment, discussions, paired/group work, observations, switching activities, audio/visuals etc. The teachers' dynamics need to be understood by the teachers, and behaviors or teaching approaches need to be adjusted. Again, learning needs, methods or styles of the learners may be different; in this respect, teachers need to understand the need and preferences of the learners and prepare the lesson plan accordingly to meet the learning objective of all learners rather than certain individuals. Most importantly, teachers need to identify the learning barriers as quickly as possible so that effective and efficient teaching may take place. For example, sometimes students are disruptive as they have some barriers in learning by reason of weak or low management skills including language barrier, low self-esteem, confidence, feeling of being inappropriate etc. In this case, rather than giving them warnings, it is better for the teachers to know the underlying causes and respond accordingly. Positive feedback, sometimes, play role as tonic in having profound positive impact on the confidence and self-esteem of the students. Finally, it is essential for the teachers to enhance student engagement through active learning, to promote student inclusivity through the learning process (experiential and blended learning) and to match outcome with the faculty and student expectations through assessments. They might easily be possible for the teachers to do so, if they can be able to communicate effectively, be in control, be consistent with the rules, provide choice and adjust themselves and finally be creative in managing behavior.

In light of the statistical results, the following conclusions have been reached:

Both effectiveness and efficiency play a role in improving school head's management skills dynamics in a high convergent, and that quality learnings would take place.

Teachers should adhere to the established principles and promote the concept of effectiveness and efficiency as basic tools that contribute to the quality of learning.

Teachers need to be informed of performance appraisal criteria and be provided with feedback which addresses their weaknesses and enhances their strengths.

It is important for teachers and school heads to study and simplify work procedures so that following them can be easy. These procedures should be openly declared in a public forum and engaged them with the necessary and appropriate instructions to improve performance.

The following recommendations are also provided:

The need for high quality instruction to prepare students in a high quality career as they step into the next chapter of journey of life. Task performance should be enhanced and practical exercises must always be the focus of teaching and learning.

Ensures that close coordination and collaboration of school stakeholders such as school heads, teachers and students should have an active engagement to combat weak learnings and becoming efficient and effective in the delivery of the quality of instruction in the years ahead.

It is important to focus on the application of collaboration to enhance the progress of learnings and improving quality of instruction in all phases of engagements.

Efforts should be made to activate the role of schools, universities, mosques, the media, and civil society institutions in spreading a culture of effectiveness and efficiency paying attention on the state of learners and career development.

It is important to enact laws and legislations that oblige the school administrators and teachers along with the parents to be made primary responsible in the learning of the students and pupils in the BARM.

Finally, this study recommends that researchers and scholars should conduct further studies regarding avenues in better performing of school stakeholders to the end of improving instructions and other corollary services.

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