

Instructional Competencies of Accountancy, Business and Management Teachers and the Entrepreneurial Skills of the Grade 12 students among public schools in Zone IV, Division of Zambales

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Abstract

This study aimed to investigate the instructional competencies of Accountancy, Business and Management (ABM) **teachers and** their relationship to the performance skills in entrepreneurship of grade 12 students in public schools in Zone IV, Division of Zambales during the academic year 2018-2019. The descriptive-correlation method was used to analyze if there is a significant correlation between the instructional competencies of ABM teachers and the performance skills in entrepreneurship of the students. The teacher- respondents demonstrated **a high** level of human relations, organizational, technical, and conceptual skills. However, the ABM students received a mean score that indicated a “needs improvement” level of performance skills in entrepreneurship. A very low positive correlation was found between the instructional competency of teachers in terms of human relations skills and the performance skill of students in entrepreneurship. The study recommended additional skills training for teachers through workshops and enrolling in TESDA Courses, and for ABM teachers to strive for an outstanding level of competencies through professional education. It also suggested conducting human relations development symposium or team building to enhance the interactions among teachers and students. Finally, a follow-up study may be conducted to validate the results of this research by extending the study to other schools or districts offering the same strand.

Keywords: Instructional competencies; Accountancy, Business and Management (ABM); Performance skills; Entrepreneurship; Human relations skills; Organizational skills; technical skills; Conceptual skills; Skills training; classroom management; classroom organization; classroom discipline.

1. Introduction

The importance of entrepreneurship in the Philippines and the need for effective teachers to enhance student achievement. Business schools in the Philippines have incorporated entrepreneurship into their curriculum, but it has been observed that many Filipino graduates prefer to work abroad rather than engage in entrepreneurial activities. The school administrators have expressed their concern regarding the possible low levels of entrepreneurial spirit among business students.

Previous research has emphasized the importance of effective teachers as the most critical factor in determining school and student success. It is important for teachers to continually update their knowledge and skills to meet the demands of the current technological society and advance students' achievement in any field.

The Philippine Constitution speaks elaborately of the right to education, and every child has the right to education and to a system of education that values the child's culture, language, and community without discrimination or hindrance. Teachers must also be kept informed of new methods and materials that will make their teaching more stimulating and effective. Ongoing professional development is seen as very important if a teacher is to be an active participant in schools or learning communities.

The introduction also discusses the creation of Senior High School in the Philippines. President Benigno Aquino III implemented the K to 12 basic education programs to add two years to the basic education system, giving public-school children an even chance of succeeding. The majority of the public surveyed during consultations favored the K to 12 programs, and the program aims to prepare students for higher education, entrepreneurship, or employment. The shift from the Basic Education Curriculum to the new K to 12 Curriculum started in the school year 2012-2013 in the Republic of the Philippines.

Nomenclature	
A	radius of
B	position of
C further nomenclature continues down the page inside the text box	

2. Methodology

2.1 Research Design

The study employed the descriptive-correlational survey method of research.

2.2 Respondents

The first group of respondents of the study involved all the forty (40) teachers teaching the Entrepreneurship and other specialized subjects in the Accountancy, Business and Management Strand of the Senior High School curriculum in Zone 4, Division of Zambales during the Academic Year 2018 - 2019. The second group of respondents was two hundred sixty-two (262) Grade 12 ABM students selected using stratified random sampling across 5 public high schools offering the ABM strand in Zone 4, Division of Zambales. The total number of each population group of students will be taken as respondents in this study. The study was conducted among public high schools offering ABM in Zone 4, Division of Zambales which covers the areas of Subic, Castillejos, San Marcelino and San Antonio.

2.3 Instrument

A research survey-checklist instrument was developed for the study to collect data from the teacher-respondents and survey-questionnaire to collect data from the student-respondents. This was a researcher-made instrument based on literature reviewed and some studies scanned by the researcher. Construct as well as contents were checked thoroughly to ensure validity and to make sure that specific questions raised were answered accordingly.

The survey – checklist questionnaire for ABM teachers consisted of two parts: Part elicited data on the profile of the ABM teachers as to age, gender, highest educational attainment, eligibility, certifications,

area of specialization, number of years in teaching, industry exposure and attendance to relevant seminars and trainings. Part II of the instrument is a survey-checklist wherein the four-point Likert – scale was used to gather data needed which served as basis in determining the level of instructional competencies of the ABM teachers with respect to classroom management, classroom organization, classroom discipline, organization of instruction, implementation of instruction and monitoring student progress and potentials.

The survey-questionnaire for the entrepreneurial skills of the Grade 12 only consisted of the survey-questionnaire similar or parallel to that of the Part II.

The instrument was validated by the research adviser, three (3) experts from the field of education or teaching. They reviewed the items, and their suggestions and recommendations were incorporated. The second draft of the instrument was pre-tested to ten (10) ABM teachers and twenty (20) Grade 12 in Zone IV, Zambales which were included as respondents. Reliability coefficient was computed to ensure a high degree of reliability using the Cronbach alpha. An alpha greater than .07 indicated high reliability of the instrument.

Table 2. The Validity and Reliability of the Instrument was measured using the Cronbach's Alpha

SKILLS	CHRONBACH'S ALPHA	NUMBER OF ITEMS
HUMAN RELATION SKILLS	.936	17
ORGANIZATIONAL SKILLS	.962	20
TECHNICAL SKILLS	.969	25
CONCEPTUAL SKILLS	.942	16

Table 2 Shows that all the coefficients have values greater than 0.7 hence, the reliability of the instruments in terms of the 4 major variables in terms of human relation skills, organizational skills, technical skills, and conceptual skills .

2.4 Data Gathering Procedure

A letter of request to conduct the study was given to the Division Office of Zambales for the Superintendent's approval. Endorsement letter was sought for the approval of the principal and Department Head/ABM Coordinators to allow the researcher to personally gather the data needed for the study. Teacher-Respondents were identified, teachers who teach from the ABM Strand and those who teach Entrepreneurship subject. Student-respondents were also identified; students from grade 12 in Zone IV, Zambales were solicited to participate voluntarily. Participating students took a group discussion, which provided a brief overview of the research including how data would be used, and stored, as well as instructions for completing a participation agreement if they chose to be included in the study. Instruments were collected immediately to ensure a high percentage of retrieval. Informed consent was discussed to the teacher-respondents as well as student-respondents to ensure trustworthiness, objectivity and protect confidentiality of responses.

The entrepreneurial skills of the Grade 12 students were taken from the result of the test instrument that was adapted based on the DepEd K to 12 Entrepreneurship Curriculum Guide Learning Competencies. The test instrument was administered with a formal letter of permission from the School Principal.

2.5 Data Analysis

The following statistical tools were used to determine how does the "Instructional Competencies of ABM Teachers and the Entrepreneurial Skills of the grade 12 students be described to assess the needs and address ABM teachers' instructional practices and competencies and their level of difficulty.

All data yielded by the instrument were tallied, tabulated, analyzed, and interpreted accordingly, using the Software Package for Social Sciences (SPSS).

To interpret the data effectively, the researcher employed following statistical treatment:

1. Frequency /Percentage. This was employed to determine the frequency and percentage distribution of personal related variables of the respondents.

2. Mean. This was used to determine the assessment of the respondents on instructional competencies of ABM teachers.
3. Analysis of Variance (ANOVA) or F-Test. This was used to test the significant difference on instructional competencies when grouped according to the profile variables of ABM teachers.
4. Pearson r Product Moment Correlation Coefficient. This was employed to test the correlation of instructional competencies of ABM teachers with the entrepreneurial skills among the Grade 12 students. Range of Computed r-Value used to interpret Results (Belecina, Baccay and Mateo, 2016):

± 1.00	Perfect Correlation
$\pm 0.75 - 0.99$	Very High Correlation
$\pm 0.50 - 0.74$	Moderate High Correlation
$\pm 0.25 - 0.49$	Moderate Low Correlation
$\pm 0.01 - 0.24$	Very Low Correlation
0	No Correlation

5. Likert Scale. The scale was patterned after the Likert Scale:
Likert Scale on Instructional Competencies of ABM Teachers

Code	Description	Ordinal Scale	Point Scale
O	Outstanding Competency	4	3.50 – 4.00
HC	High Competency	3	2.50 – 3.49
MC	Moderate Competency	2	1.50 – 2.49
LC	Low Competency	1	1.00 – 1.49

Likert Scale on Entrepreneurial Skills Test of the Grade 12
ABM Students in Zone IV, Division of Zambales

Code	Description	Point Scale
O	Outstanding Competency	81 – 100
VG	High Competency	61 – 80
G	Moderate Competency	41 – 60
NI	Low Competency	21 – 40
P	Poor	1 – 20

3. Results and Discussion

Tabulations, analyses and treatment of data gathered are presented in this chapter. Appropriate statistical tools include frequency and percentage counts, test of differences using single factor ANOVA and correlations between the instructional competencies of ABM teachers and entrepreneurial skills of the Grade

12 ABM students.

3.1 Profile of ABM Teachers

The profile of ABM teachers was described in terms of age, sex, highest educational attainment, eligibility, certifications, area of specialization/subject taught length of years in teaching, industry exposure and experience, and the number of trainings attended relevant in teaching ABM. Table 3 presents the frequency and percentage distribution of the profile of ABM teachers.

Age. Greater proportion (13 out of 30) or 43.34% of the retail establishments belonged to the age band 33 – 38 and least distributed (3.33%) in the age band 45 - 50. The mean age 36.23 year indicates that the teachers are in their mid-adulthood. It implies that the teachers being in the mid-adulthood are in the stage of being aggressive on doing what is expected of them.

Sex. Majority (19 out 30) or 63.33% of the teacher respondents were female and there were 36.67% male respondents. This implies that females dominate the ABM instructional roster.

Table 3. Frequency and Percentage Distribution of ABM Teachers' Profile

Variable	Categories	Frequency	%
Age (Mean =36.23 years)	21 – 26 y. o.	3	10.0
	27 – 32	6	20.0
	33 – 38	13	43.34
	39 – 44	4	13.33
	45 – 50	4	3.33
	51 – 56	4	10.0
Sex	Male	11	36.67
	Female	19	63.33
Highest Educational Attainment	Doctorate Degree	1	3.33
	Master's degree	11	36.67
	MA/MS Units	11	36.67
	Bachelor's degree	7	23.33
Eligibility	PBET/LET	27	90.0
	CS Professional and	3	3.33
	CS Sub-professional	3	6.67
Certifications	TM from TESDA	4	13.33
	NC from TESDA	23	76.67
	Bookkeeping	3	10.0
Area of Specialization / Subject Taught	Fundamental of ABM	2	6.67
	Business Management	2	6.67
	Marketing	3	10.00
	Finance	4	13.33

	Economics	4	13.33
	Organization & Mgt.	3	10.00
	Math of Investment	3	10.00
	Entrepreneurship	9	30.00
Length of Years in Teaching (Mean=6.57 years)	1 – 5 years	19	63.33
	6 – 10	4	13.33
	11 – 15	3	10.00
	16 – 20		10.00
	21 – 25	4	3.33
Industry Exposure & Experience	With Exposure	24	80.00
	Without Exposure	6	20.00
Number of Relevant Trainings in Teaching ABM (Mean=1.33)	One Training	23	76.67
	Two Trainings	5	16.67
			3.33
	Three to Four Trainings	2	3.33

3.2 Highest Educational Attainment.

Even distribution of teachers belonged under categories *master's degree* and *MA/MS units* both having frequencies 11 out of 30 (36.67%) while there is one (3.33%) who fall under category *doctorate degree*. It implies that the teachers already value professional advancement as a requirement in their profession.

3.3 Eligibility.

Majority (27 out of 30) or 90% of the teacher respondents have already passed the PBET (Professional Board Examination for Teacher) or LET (Licensure Examination for Teachers). One (3.33%) of the ABM teachers is a Career Service Professional. This indicates that the majority in roster of teachers in the ABM strand possess the minimum requirement of the department (Dep Ed) for teachers.

3.4 Certifications.

Majority (23 out of 30) or 76.67% of the teacher respondents have national certificates from TESDA and there 3 (10%) who have bookkeeping certificates. It indicates that the teacher respondents have acquired the skills needed in teaching the senior high school strand ABM. It implies that they have acquired the required skills in accountancy, business and management and are equipped with enough knowledge they need to instill and impart to their students in the strand.

3.4 Area of Specialization/Subject Taught.

Greater proportion (9 out of 30) or 30% of the teacher respondents specialize in and teach entrepreneurship 6.67% teaches fundamentals of ABM and Business Management. This implies that there are more teachers who teach in the ABM strand are equipped with entrepreneurial skill, hence the tool to impart to the students.

3.5 Length of Years in Teaching.

Majority (19 out of 30) 63.33% of the teacher respondents have been in the service for 1 – 5 years and there is one (3.33%) who have been in the teaching profession for 21 – 25 years. The mean 6.57 years

indicates that majority of the teachers are already in the teaching profession for more than 5 years. This implies that the teachers in the ABM strand were employed in the department since the K-12 curriculum started to be implemented in 2013.

Starting in the 2012-2013 school year, the education system of the Philippines was enhanced from the ten years of basic education to a 12-year program through an initiative called the K-12 Education Plan sponsored by the Department of Education

3.6 Industry Exposure and Experience.

Majority (24 out of 30) or 80% of the teacher respondents have industry exposure and experience and 6 (20%) were not exposed in the business industry. The success of schools and colleges to fulfill the need to prepare students to meet intended societal changes depends on new patterns of teachers' training and exposures (Thomas, 2002).

3.7 Number of Relevant Training in Teaching ABM.

Majority (23 out of 30) or 76.67% of the teacher respondents have one training relevant in teaching ABM. At least one (3.33%) of the teacher respondents have either 3 or 4 trainings relevant in teaching ABM. This implies that teachers in ABM strand do not see the importance of attending relevant trainings to enhance their skill in teaching ABM.

This supports the statement of Luft, et al (2009) that Although teaching is often an individual teacher's endeavor, professional development, mentoring, and coaching for teachers can impact how concepts are taught in classrooms

3.8 Instructional Competencies of ABM Teachers

The level of instructional competencies ABM teachers was measured in terms of human relations, organizational, technical and conceptual skills. Table 4 presents result of data collection on the instructional competencies of ABM teachers.

3.9 Human Relations Skills.

The teacher respondents garnered the highest mean 3.19 which indicates high competency level in terms of classroom discipline. The lowest mean 3.11 indicates high competency level in terms of classroom management. They garnered a composite value of 3.16, which indicates high competency level of ABM teachers in terms human relations skills. It implies that the teacher possesses the skill in of reinforcing and reiterating expectations for positive behavior of the students using appropriate communication and disciplinary measures under a balance and consistent handling of daily routine, tasks and needs.

The study and understanding of human relations can help us in our workplace, and as a result, assist us in achieving career success. The better our human relations, the more likely we are to grow both professionally and personally. This adheres to the statement of Reddy (2018) that as no individual can become a teacher unless he or she is not able to communicate well. A teacher is required to share his or her experience with the students, which demands interaction, hence human relations.

3.10 Organizational Skills.

The teachers garnered a highest mean 3.23, which indicates high competency level in terms of teacher' expectations and lowest mean 3.13, which indicates high competency level in terms of instruction plans. The composite value 3.17 indicates a high competency level in terms of organizational skills. It implies that the ABM teachers can link learning objectives and activities considering the students' attention span and learning styles and exhibits high competencies in organizing and implementing instructions to real life situation. Teachers must juggle several tasks, from teaching to attending meetings to lesson planning to grading. Teachers need to be able to keep all these duties organized, and complete tasks in a timely manner.

Skills in relation to education organization: Classroom Organization, Classroom Management, Leadership, Maintain Records, Planning, Prepared, Record Keeping, Scheduling, and Time Management

An added challenge is that teachers are usually held responsible for doing more work than can possibly fit into the hours of a traditional workday. Some work from home is a virtual necessity, but only excellent organizational skills and excellent professional boundaries can help a teacher determine which tasks can safely be left undone in order to free up necessary personal time. Examples of organizational skills for teachers is Creating a Comfortable Learning Environment, Creating Assignments, Creating Exams, create a Positive Learning Environment, Creating New Ideas, Delivery of Material, Develop Lesson Plans, Lesson Plans, Manage Student Behavior, Preparing Lessons, Professional, Provide Student Support Services, and Results Oriented.

This finding supports the statement of Freiberg (2002) that Organizing strategies help create the necessary conditions for learning—and teachers can acquire these skills systematically rather than depending on trial and error. Organizational behavior and culture lead to performance, either poor or high achieving performance. It truly all depends on what organizational culture is shaped. Robert Lussier and John Hendon (2013) describe organization culture as “values, beliefs, and assumptions about appropriate behavior that members of an organization share” (p. 57). The better the organizational structure is, the more likely higher organizational performance will be achieved and vice versa.

Table 4. Instructional Competency Level of ABM Teachers

Human Relations Skills		Weighted Mean	Qualitative Interpretation
1	Classroom Management	3.11	High Competency
2	Classroom Organization	3.18	High Competency
3	Classroom Discipline	3.19	High Competency
Composite		3.16	High Competency
Organizational Skills		Weighted Mean	Qualitative Interpretation
1	Importance of Instruction	3.16	High Competency
2	Teachers' Expectations	3.23	High Competency
3	Instruction Plans	3.13	High Competency
Composite		3.17	High Competency
Technical Skills		Weighted Mean	Qualitative Interpretation
1	Instructional Strategies	3.16	High Competency
2	Content and Expectations	3.09	High Competency
3	Complexity	3.07	High Competency
4	Questioning	.325	High Competency
5	Student Engagement	3.15	High Competency
Composite		3.14	High Competency

Conceptual Skills	Weighted Mean	Qualitative Interpretation
1 Giving Homework and Performance Tasks	3.15	High Competency
2 Feedback	3.23	High Competency
3 Responding to Student Needs and Abilities	3.16	High Competency
Composite	3.18	High Competency
Overall Weighted Mean	3.17	High Competency

3.4 Technical Skills.

The teacher respondents garnered a highest mean 3.25, which indicates high competency level in terms of questioning and a lowest mean 3.07, which indicates high competency level in terms of complexity. The composite value 3.14 indicates high competency level of the teachers in terms of technical skills. This implies that the ABM teachers could utilize questioning reflecting the content and goals of the lessons and using different techniques and instructional strategies and meaningful conceptualization emphasizing the students' own knowledge of the real world.

Teachers must, of course, understand the material that they teach. Naturally, different positions require different types and levels of skill, but even teachers of very young children need significant expertise. It is not enough for a first-grade math teacher to know how to perform basic arithmetic, for example. He or she must have a deep understanding of numbers and numeric relationships in order to be able to explain the material in a thorough and responsive way.

This adheres to the statement of Doyle (2018) that Teachers must, of course, understand the material that they teach. Naturally, different positions require different types and levels of skill, but even teachers of very young children need significant expertise.

The Philippines may go beyond the standing of employment in the country, rights and importance should be understood. To support this findings, as specified in the book of Labor Economics by Cristobal M. Pagoso, it state that in view of low literacy rates in rising unemployment in developing countries it has become imperative that greater educational opportunities should be provided for the great proportion of adult population as well as the large number of youth outside the formal school system to help them acquire further knowledge and skill thereby improve their livelihood and strengthen the country.

3.5 Conceptual Skills.

The teacher respondents garnered a highest mean 3.23, which indicates high competency level in terms of feedback and a lowest mean 3.15, which indicates high competency level in terms of giving homework and performance tasks. They garnered a composite value of 3.18 which indicates high competency level in terms of conceptual skills. This implies that the ABM teacher could effectively explain homework and creatively design performance tasks, and the ability to suit instruction to students' achievement levels and needs and assessing student progress. Conceptual skills are useful for almost every position. Even when you have a list of duties, it is always helpful to know how your part fits into the broader goals of your organization.

This supports the statement of Doyle (2018) that conceptual skills help employees "see the forest through the trees," as the saying goes. These skills help you see how all the parts of an organization work together to achieve the organization's goals. People with conceptual skills are creative and can work through abstract concepts and ideas.

Employment is the capacity of an individual to showcase his talent and to use the trainings gathered in course program, Thomas Powers on his book "Educating for Careers" stated the notion that marketable

skills provided today's crop of worker's employment opportunities.⁶ The statement of Powers is relevant to the present study because he pointed out that education is very important in having the marketability and general skills needed in finding an appropriate job. In relation to the k to 12 program advocacies, this study will help teachers to develop instructional competencies and transfer life-long learning skills among the grade 12 students, to choose a course to pursue and the area of specialization for college education which will opt the learners in the creation of an enterprise for business soon.

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3.11 Level of Entrepreneurial Skills of the Grade 12 Students

The level of entrepreneurial skills of the grade 12 ABM students was measured through a written performance test. Table 5 shows the frequency and percentage distribution of the students falling under different levels.

Table 5. Level of Entrepreneurial Skills of the Grade 12 Students

Students' Level of Entrepreneurial Skills	Frequency	%	Mean Score	Qualitative Interpretation
Very Good	3	1.15	34.34	Needs Improvement
Good	58	22.14		
Need Improvement	200	76.34		
Poor	1	0.38		

It can be seen on the table that the majority (200 out of 262) 76.34% of the ABM students are in the "needs improvement" level of entrepreneurial skills. Significantly, none of them had reached the outstanding level and one is in the poor level of entrepreneurial skills. The mean score 34.34 indicates that the student collectively "needs improvement" in terms of their entrepreneurial skills. This implies that the Grade 12 ABM students have not yet acquired the necessary skills in entrepreneurship as expected of them being graduating student. Factors contributing to the very low entrepreneurial skills result need to be addressed by the teachers, by the school management or by the department consequently.

The summary of entrepreneurial skills of grade 12 students was measured through a written performance test. Table 6 shows the distribution of the students falling under four categories in terms of Human relations, conceptual skills, organizational skills, and technical skills.

Table 6. Summary of Entrepreneurial Skills of Grade 12 Students

Instructional competencies of ABM Teachers on the Four Major Categories	DESCRIPTION
Personal characteristics – Applied as the Human Relation Skills	Optimism, Vision, Initiative, Desire for Control, Drive and Persistence, Risk Tolerance, and Resilience.
Interpersonal skills – Applied as the Organizational Skills	Leadership and Motivation, Communication Skills, Listening, Personal Relations, Negotiation, and Ethics
Critical and creative thinking skills – Applied as the Technical Skills	Creative Thinking, Problem Solving and Recognizing Opportunities
Practical skills – Applied as the Conceptual Skills	Goal Setting, Planning and Organizing, and Decision Making ➤ Business Knowledge ➤ Entrepreneurial Knowledge ➤ Opportunity-Specific Knowledge ➤ Venture-Specific Knowledge

Referring to table of specification in appendix C of the Survey Questionnaire.

Differences on Level of Competencies of ABM Teachers

The differences in the level of instructional competencies in terms human relation, organizational, technical, and conceptual skills of ABM teachers was analyzed according to the profile variables hypothesized to have effect significantly. Difference in Instructional Competency in terms of Human Relations Skills. At a level of significant ($\alpha=.05$), the researcher hypothesized that the level of instructional competencies of ABM teachers in terms of human relations skills significantly do not differ when they are grouped according to profile variables. Table 7 presents the analysis of variance on level of instructional competencies in terms of human relations skills when ABM teachers are grouped according to their profile variables. Among the profile variables, only the null hypothesis on the variable “number of relevant trainings in teaching ABM” ($F=3.052$, $Sig=.046$) was rejected, hence there is a significant difference on the level of instructional competencies of ABM teachers.

This indicates that other profile variables have no influence on the level of instructional competencies of the teachers in terms of human relations skill. However, an influence brought by the training attended by the teacher significantly contributes to their differences in their instructional competencies in terms of human relations. It implies that not all ABM teachers are given the opportunities to enhance their human relations skills through attending training relevant in teaching the ABM strand. It also implies that the teachers themselves have minimal realization of the importance of attending training to improve their human relations skills.

This coincides with the statement of Quicknet (2016) that we can include following the human relations skills to provide effective teaching talents. Often says that teaching is God gifted but getting good education training and psychologize best educational books, we can get this skill and create better result.

Table 7. ANOVA on Level of Competency in Human Relations of ABM Teachers when Grouped According Profile Variables

Profile	Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.	Interpretation
Age	Between Groups	.899	5	.180	.857	.524	Not Significant
	Within Groups	5.036	24	.210			
	Total	5.936	29				
Sex	Between Groups	.030	1	.030	.142	.709	Not Significant
	Within Groups	5.906	28	.211			
	Total	5.936	29				
Educational Attainment	Between Groups	1.121	3	.374	2.017	.136	Not Significant
	Within Groups	4.815	26	.185			
	Total	5.936	29				
Eligibility	Between Groups	.342	2	.171	.826	.449	Not Significant
	Within Groups	5.593	27	.207			
	Total	5.936	29				
Certifications	Between Groups	.888	2	.444	2.376	.112	Not Significant
	Within Groups	5.047	27	.187			
	Total	5.936	29				
Area of Specialization	Between Groups	.424	7	.061	.242	.970	Not Significant
	Within Groups	5.512	22	.251			
	Total	5.936	29				
Length of Years in Teaching	Between Groups	.389	4	.097	.438	.780	Not Significant
	Within Groups	5.547	25	.222			
	Total	5.936	29				
Industry Exposure & Experience	Between Groups	.001	1	.001	.001	.972	Not Significant
	Within Groups	5.935	28	.212			
	Total	5.936	29				
Number of Relevant Trainings in Teaching ABM	Between Groups	1.546	3	.515	3.052	.046	Significant
	Within Groups	4.390	26	.169			
	Total	5.936	29				

Difference on Instructional Competency in terms of Organizational Skills. Table 8 presents the analysis of variance on level of instructional competencies in terms of organizational skills when ABM teachers are grouped according to their profile variables.

At a level of significant ($\alpha=.05$), the researcher hypothesized that the level of instructional competencies of ABM teachers in terms of organizational skills significantly do not differ when they are grouped according to profile variables.

On profile variables, only the null hypothesis on the variable “certifications” ($F=3.931$, $Sig.=.032$) was rejected, hence there is significant difference on the level of instructional competencies of ABM teachers. Data also revealed that other profile variables have no influence on the level of instructional competencies of the teachers in terms of organizational skills.

However, an influence brought by the certificates held by the teachers significantly contributes to their differences in their instructional competencies in terms of organizational skills. It implies that certificates issued by the TESDA are a helpful tool in ensuring effective teaching in the ABM strand.

Table 8. ANOVA on Level of Competency in Organizational Skills of ABM Teachers when Grouped

According Profile Variables

Profile	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.	Interpretation
Age	Between Groups	.636	5	.127			
	Within Groups	6.185	24	.258	.494	.778	Not Significant
	Total	6.821	29				
Sex	Between Groups	.003	1	.003			
	Within Groups	6.818	28	.244	.011	.918	Not Significant
	Total	6.821	29				
Educational Attainment	Between Groups	.663	3	.221			
	Within Groups	6.157	26	.237	.934	.438	Not Significant
	Total	6.821	29				
Eligibility	Between Groups	.112	2	.056			
	Within Groups	6.709	27	.248	.225	.800	Not Significant
	Total	6.821	29				
Certifications	Between Groups	1.538	2	.769			
	Within Groups	5.283	27	.196	3.931	.032	Significant
	Total	6.821	29				
Area of Specialization	Between Groups	.859	7	.123			
	Within Groups	5.962	22	.271	.453	.858	Not Significant
	Total	6.821	29				
Length of Years in Teaching	Between Groups	.763	4	.191			
	Within Groups	6.058	25	.242	.787	.544	Not Significant
	Total	6.821	29				
Industry Exposure & Experience	Between Groups	.008	1	.008			
	Within Groups	6.813	28	.243	.031	.862	Not Significant
	Total	6.821	29				
Number of Relevant Trainings in Teaching ABM	Between Groups	1.501	3	.500			
	Within Groups	5.319	26	.205	2.446	.086	Not Significant
	Total	6.821	29				

Difference in Instructional Competency in terms of Technical Skills. At a level of significant ($\alpha=.05$), the researcher hypothesized that the level of instructional competencies of ABM teachers in terms of technical skills significantly do not differ when they are grouped according to profile variables. Table 9 presents the analysis of variance on level of instructional competencies in terms of technical skills when ABM teachers are grouped according to their profile variables.

Table 9 ANOVA on Level of Competency in Technical Skills of ABM Teachers when Grouped According Profile Variables

Profile	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.	Interpretation
Age	Between Groups	.552	5	.110			
	Within Groups	5.315	24	.221	.498	.774	Not Significant
	Total	5.867	29				

Sex	Between Groups	.001	1	.001			
	Within Groups	5.866	28	.210	.005	.947	Not Significant
	Total	5.867	29				
Educational Attainment	Between Groups	1.023	3	.341			
	Within Groups	4.844	26	.186	1.830	.166	Not Significant
	Total	5.867	29				
Eligibility	Between Groups	.149	2	.074			
	Within Groups	5.719	27	.212	.351	.707	Not Significant
	Total	5.867	29				
Certifications	Between Groups	1.237	2	.618			
	Within Groups	4.630	27	.171	3.606	.041	Significant
	Total	5.867	29				
Area of Specialization	Between Groups	.646	7	.092			
	Within Groups	5.222	22	.237	.389	.899	Not Significant
	Total	5.867	29				
Length of Years in Teaching	Between Groups	.324	4	.081			
	Within Groups	5.543	25	.222	.365	.831	Not Significant
	Total	5.867	29				
Industry Exposure & Experience	Between Groups	.094	1	.094			
	Within Groups	5.773	28	.206	.456	.505	Not Significant
	Total	5.867	29				
Number of Relevant Trainings in Teaching ABM	Between Groups	1.445	3	.482			
	Within Groups	4.422	26	.170	2.832	.058	Not Significant
	Total	5.867	9				

Among the profile variables, only the null hypothesis on the variable “certifications” ($F=3.606$, $\text{Sig}=.041$) was rejected, hence there is a significant difference on the level of instructional competencies of ABM teachers. Data also revealed that other profile variables have no influence on the level of instructional competencies of the teachers in terms of technical skills.

However, an influence brought by the certificates held by the teachers significantly contribute to their differences in their instructional competencies in terms of technical skills. It implies that acquiring certificates issued by the TESDA equips the teachers with necessary technical skills needed relevant to teaching the ABM strand.

Difference on Instructional Competency in terms of Conceptual Skills. At a level of significant ($\alpha=.05$), the researcher hypothesized that the level of instructional competencies of ABM teachers in terms of conceptual skills significantly do not differ when they are grouped according to profile variables. Table 10 presents the analysis of variance on level of instructional competencies in terms of conceptual skills when ABM teachers are grouped according to their profile variables. Among the profile variables, only the null hypothesis on the variable “number of relevant trainings in teaching ABM” ($F=3.017$, $\text{Sig}=.048$) was rejected, hence significant difference on the level of instructional competencies of ABM teachers. This indicates that other profile variables have no influence on the level of instructional competencies of the teachers in terms of conceptual skills. However, an influence brought by the trainings attended by the teacher significantly contribute to their differences in their instructional competencies in terms of conceptual skills. It implies that the conceptual skills acquired through trainings relevant to ABM teaching significantly contribute to their level of competencies.

Table 10. ANOVA on Level of Competency in Conceptual Skills of ABM Teachers when Grouped According Profile Variables

Profile	Source of Variance	Sum of Squares	Df	Mean Squares	F	Sig.	Interpretation
Age	Between Groups	.610	5	.122			
	Within Groups	4.584	24	.191	.638	.673	Not Significant
	Total	5.193	29				
Sex	Between Groups	.001	1	.001			
	Within Groups	5.192	28	.185	.007	.936	Not Significant
	Total	5.193	29				
Educational Attainment	Between Groups	.657	3	.219			
	Within Groups	4.537	26	.174	1.254	.311	Not Significant
	Total	5.193	29				
Eligibility	Between Groups	.136	2	.068			
	Within Groups	5.057	27	.187	.363	.699	Not Significant
	Total	5.193	29				
Certifications	Between Groups	.896	2	.448			
	Within Groups	4.297	27	.159	2.817	.077	Not Significant
	Total	5.193	29				
Area of Specialization	Between Groups	.902	7	.129			
	Within Groups	4.292	22	.195	.660	.703	Not Significant
	Total	5.193	29				
Length of Years in Teaching	Between Groups	.383	4	.096			
	Within Groups	4.810	25	.192	.498	.737	Not Significant
	Total	5.193	29				
Industry Exposure & Experience	Between Groups	.001	1	.001			
	Within Groups	5.192	28	.185	.006	.937	Not Significant
	Total	5.193	29				
Number of Relevant Trainings in Teaching ABM	Between Groups	1.341	3	.447			
	Within Groups	3.852	26	.148	3.017	.048	Significant
	Total	5.193	29				

Relationship between Teacher's Level of Competency and Entrepreneurial Skills of the Grade 12 Students

Table 11. Correlation between Teacher's Level of Competencies and Entrepreneurial Skills of the Grade 12 ABM Students

ABM Instructional Competencies	Teachers' Coefficients	Entrepreneurial Skills among the Grade 12 ABM Students
Human Relation Skills	Pearson Correlation	.163**
	Sig. (2-tailed)	.008
	N	262
Organizational Skills	Pearson Correlation	.097
	Sig. (2-tailed)	.117
	N	262
Technical Skills	Pearson Correlation	.104
	Sig. (2-tailed)	.093

	N	262
	Pearson Correlation	.079
Conceptual Skills	Sig. (2-tailed)	.205
	N	262

****Correlation is significant at the 0.01 level (2-tailed)**

It can be seen on the table that human relations skills ($r=.163$) have Sig. (2-tailed) = .008 which is less than alpha level, $\alpha=.01$. This signifies rejection of the null hypothesis, hence a very low positive correlation. This indicates that the instructional competencies of teachers in terms of their human relations skills has a significant positive relationship with the entrepreneurial skills among the grade 12 ABM students. It implies that an improvement in the human relations skills of teachers would result to an increase in the entrepreneurial skills of students.

Table also reveals that organizational skills ($r=.097$, Sig.=.117), technical skills ($r=.093$, Sig.=.093), and conceptual skills ($r=.079$, Sig.=.205) had no significant correlations with the entrepreneurial skills of students. It indicates that the level of instructional competencies of teachers in terms of organizational, technical, and conceptual skills has no relationship with the entrepreneurial skills among the students. These findings adhere to the findings of Sultan et al (2014) of significant findings regarding the effect of teachers' competence on students' entrepreneurial skills. Professional characteristics, teaching skills and classroom climate are three important factors which are important in teachers control and influence the rate of achievement of students.

It implies that human relations skills of teacher are very important in improving the entrepreneurial skills of the students. It also implies that the students put more weights on the human relation characteristic of their teachers for them to be motivated in learning the skills they need and that students of this era are more motivated to learn when their teachers who know how to address their needs, resolve conflicts of any form and foster learning culture.

4. Conclusions

From the results and findings of the data collection process, the researcher formulated the following conclusions:

First, a typical ABM teacher is mid-adult female professional who specializes in entrepreneurship pursuing graduate education with national certificate, have been in the service for more than half a decade and exposed in the business industry.

Second, the ABM teacher has high instructional competency in terms of human relations, organizational, technical and conceptual skills. He/she is equipped with the necessary skills in reinforcing and reiterating expectations for positive behavior of the students, linking learning objectives and activities as to students learning styles, using different techniques and instructional strategies and meaningful conceptualization emphasizing the students' own knowledge of the real world, and suiting instruction to students' achievement levels and needs.

Third, the students have not yet acquired the necessary skills in entrepreneurship as expected of them being graduating students in the ABM strand.

Fourth, skills training and certificates acquired is a very important factor for teachers to be effective in improving the entrepreneurial skills among the grade 12 ABM students.

Lastly, human relation skills of teacher play an important role in facilitating learning especially on the entrepreneurial skills of students.

5. Recommendation

The researcher recommends the following actions referenced from the findings and conclusions.

1. All teachers may be given opportunities to undergo additional skills training through workshops and enroll in TESDA courses.
2. The ABM teacher may strive to attain an outstanding level of competencies through continuous professional education.
3. The school management may identify other factors that affect the entrepreneurial skills among the grade 12 ABM students, e.g. benchmarking to other school who excel in entrepreneurial skills development.
4. The school management may conduct human relations development symposium or team building to enhance the interpersonal and group interaction among teachers and students.
5. A follow-up study may be conducted to validate the results of this research by extending the study to other schools or districts offering the same strand.

REFERENCES

- Alip, R.M. (1993). Teaching Effectiveness of Public Elementary School Teachers in the Division of Zambales, School Year (1991-1992) and Factors Affecting It: A Study in Correlation (unpublished doctoral dissertation). Angeles University Foundation.
- Amare Asgedom (2004). Debates in Research Paradigms: Reflections in Qualitative Research in Higher Education. The Ethiopian Journal of Higher Education, Vol. I (II) Pp. 41-62.
- Anderson, R.D. (2012). Reforming science teaching: What research says about inquiry? Retrieved from <http://www.conservancy.umn.edu>.
- Anes, E.G. (2000). Teacher Effectiveness as Perceived by the Students of Selected Private Secondary Schools in Olongapo City: Implication to Student Performance and Progress. (Unpublished master's thesis). Columban College, Olongapo City.
- Arias, B. (2000). An Instrument for Monitoring the Development of Constructivist Learning Environment. Retrieved from <http://www.books.google.com.ph>.
- Australian Science Teachers Association and Monash University. (2002). National Professional Standards for Highly Accomplished Teachers of Science. Canberra: ASTA.
- Bates, T., et.al. (2011). The Professional Development of Teachers Educators. Teachers Educators- A Professional Development Perspective. Routledge, London and New York.
- Barroso, K., & Pon, S. (2005). Effective lesson planning, A facilitator's guide. California Adult Literacy Professional Development Project. Downloaded from <http://www.teal.ed.gov>.
- Ballou, D. and Podgursky, (1997). Teacher Pay and Teacher Quality. Kalamazoo, Mich: W.E. Upjohn Institute for Employment Research.
- Begonia, M.A. (1995). Assessment of Teachers and School Administrators on the Performance of Master Teachers in Public Elementary and Secondary Schools in Olongapo City (Unpublished master's thesis). Columban College, Olongapo, Zambales, Philippines.
- Best, A. (1989). Self-discipline, schools, and the business community. Washington, DC: National Chamber Foundation.
- Bueno, D.C. (2006). Essentials of Statistics. Statistical Differences Between Groups (1997- 2009). Columban College Inc. Olongapo City.
- Dewey, J. (1934). A common faith. New Haven, CT: Yale University Press.
- Doyle, Alison (2018). Teaching List and Examples. The Balance Careers. Retrieved on January 28, 2019 from <https://www.thebalancecareers.com/teaching-skills-list-2062488>

- Doyle, Alison (2018). Conceptual Skills List and Key Words for Resumes. The Balance Careers. Retrieved from January 28, 2019 from <https://www.thebalancecareers.com/conceptual-skills-list-and-examples-4142004>
- Freiberg, Jerome (2002). Essential Skills for New Teachers. Educational Leadership: Redesigning Professional Development, P.56-60. Retrieved on January 28, 2019 from <http://www.ascd.org/publications/educational-leadership/mar02/vol59/num06/Essential-Skills-for-New-Teachers.aspx>
- Froyen, L. A., & Iverson A. M. 1999. Schoolwide and classroom management: The reflective educator- leader (3rd ed.). Upper Saddle River, NJ; Prentice- Hall.
- Golhaber, D., Anthony, E., & Urban Inst, W.D.C. (2005). Can Teach Quality Be Effectively Assessed? National Board Certification as a Signal of Effective Teaching: Urban Institute.
- Good, R. (1980). Evaluation of a character education curriculum. In D. McClelland (ed.), Education for values. New York: Irvington Publishers.
- Guerrero, M.A. (1973). Perception of the Value of Classroom Visits in the Improvement of Instruction by Elementary School of RVM Schools in the Greater Manila Area (Unpublished master's thesis). Ateneo University, Manila, Philippines.
- Hardin, C. J. (2008). *Effective classroom management* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Hofstein, A. & Lunetta, R. (2004). Assessment of the Learning Environment of Inquiry-type Laboratories in High School Chemistry. Retrieved from <http://www.books.google.com.ph>.
- Igofther, R. (2010). Classroom Environment Scale Manual. Retrieved from <http://www.books.google.com.ph>.
- Kiehl, M. L., (2008). An Examination of Science Teachers' Learning in a Laboratory- based Professional Development Program. Proquest LLC.
- Knapp, M. S. and Plecki, M. L. (2001). Investing in the Renewal of Urban Science Teaching. Journal of Research in Science Teaching, 38, 1089-1100.
- Lawal, B. (2003). Attitudes Towards Science: A Review of the Literature and Its Implication. Retrieved from <http://www.books.google.com.ph>.
- Lawless, K. and Pellegrino, J. (2007). Professional Development in Integrating Technology into Teaching and Learning: Knows, Unknowns, and Ways to Pursue Better Questions and Answers. Review of Educational Research, 77(4), 575-614.
- Mabunga, R. G. (2011). 2011 Right to Education Situation: Philippines (1st of 3 series). Retrieved from <http://www.wordpress.com>.
- Macapagal J. T. (1998). Problems Encountered by Teachers in Teaching Mathematics in the Public Elementary Schools of District II, Division of Olongapo City (Unpublished master's thesis). Columban College, Olongapo City.
- Marzano, R.J. (2007). The art and science teaching: A comprehensive framework for effective instruction. Alexandria, Va: Association for Supervision and Curriculum Development.
- McCloskey, L. (2009). Biggest Challenges in Teaching Science. Retrieved from <http://www.gillespielab.org>.
- McIntock, M.D. (1992). Power and Pedagogy, New York. Retrieved from <http://www.ilt.columbia.edu>.
- Miller, P. (1993). Theories of Development Psychology (3rd ed.). Downloaded from <http://www.scholarlib.vt.edu>.
- Momoh, S.O. (2008). Enhancing teachers' competence in research and development in TVE studies. A paper presented in a seminar organized by National Association for teachers of technology (NATT) at FCE (Technical), Umunze, Nigeria, September 15 -18, 2008.
- Musica, J.F. (2014). Angara Urges to DepEd to Improve Math- Science Education. Retrieved from <http://www.bayanihan.org>.
- National Commission on Teaching and America's Future. (NCTAF, 1997). What Matters Most: Teaching for America's Future. New York: NCTAF.

- Okoro, O.M. (2005). Vocational and technological education in developing countries: The place and role of the teacher. *Ebonyi Technology and Vocational Education journal (ETVET)*, Vol. 1 No. 1, 1-8.
- Okoye, K.R.E. & Eze, T.I. (2008). Instructional delivery system in technical and vocational education at the secondary school level in Nigeria. A keynote address presented at a seminar organized by Nigeria Association for Teachers of Technology (NATT) at FCE(Technical), Umunze, Nigeria. September 15-18, 2008.
- Peters, R.S. (2011). *Education and the Education of Teachers. The Meaning of Quality Education*. Routledge, London, and New York.
- Pregent, R. (1994). *Understanding by Design*. Downloaded from <http://www.teal.ed.gov>.
- Ramani, K.V. (2013). *A Textbook of Educational Management. Title Role of Teacher*. Wisdom Press, New Delhi.
- Reddy, Krishna (2018). *Interpersonal Skills Importance for Teacher, Students and Managers*. Retrieved on January 28, 2019, from <https://content.wisestep.com/importance-interpersonal-skills-teachers-students-managers/>
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. Retrieved from <http://www.intime.uni.edu>.
- Silver, F. (2011). Why Is It Important for Teachers to Have Good Communication Skills? Retrieved from <http://www.work.chron.com>.
- Singh, S.P. (2013). *Strategic Management*. Strategic Management.A.I.T.B.S. Publishers, India.
- Singh, G., O'Donoghue, J. & Worton, H. (2005). Study into the effect of e-learning on higher education. *Journal of University Teaching and Learning practice*, 2 (1), 13-24.
- Smith, S.G. (2011). *Teaching Challenges and Dilemmas. The Effective Teacher*. Cengage Learning, Australia.
- Sevilla, F. (1990) *Thesis and Dissertations. Making Methodologies*. New York, Prentice Hall.
- Streshly, W.A. (2012). *The New School Management by Wandering Around. Why Teacher Teach*. Corwin, United States of America.
- Stronge, J. H., & Tucker, P. D. (2001). *Handbook on teacher evaluation: Assessing and improving performance*. Retrieved from <http://www.ascd.org>.
- Sultan S. & Shafi M. (2014). Impact of perceived teachers' competence on students' performance: evidence for mediating/ moderating role of class environment. Retrieved on January 28, 2019 from <https://files.eric.ed.gov/fulltext/EJ1098630.pdf>
- Supovitz, J. A. and Turner, H. M. (2000). The Effects of Professional Development on Science Teaching Practices and Classroom Culture. *Journal of Research in Science teaching*, 37(9), 963-980.
- Tharpe, R.G. & Gallimore, R. (1988). *Rousing Minds to Life: Teaching, Learning, and Schooling in Social Context*. Downloaded from <http://www.schoolarlib.vt.edu>.
- Thomas, E. (2002). *Teacher Education Dilemmas and Prospects: World Yearbook of Education 2002*. London. KOGAN PAGE Ltd.
- Tobin, P. (1990). *Contemporary Approaches to Research on Learning Environment: World Views*. Retrieved from <http://www.books.google.com.ph>.
- UNESDOC (2001). *Revised recommendation concerning technical and vocational education*. Paris: UNESCO Press
- Walter, E., Wilkinson, K. & Yarrow, M. (1996). *Use of Laboratory Instruction in Science*. Downloaded from <http://www.helda.helsinki.fi>.
- Weiss, I. R., Pasley, J. D., Smith, P. S., Banilower, E. R., and Heck, D. J. (2003). *Looking Inside the*

- Classroom: A Study of K to 12 Mathematics and Science Education in the United States. Chapel Hill, NC: Horizon Research Inc.
- Wipawin, N. (2004). Students' response to new learning technologies in Thailand. Thailand: Sripatum University Press.
- Wright, P. & Wright, W.P. (n.d.). Crisis Management- Step by Step. Retrieve from <http://www.wrightslaw.com>.
- Wright, S.P. (1997). Teacher and Classroom Context Effects on Student Achievement: Implications for Teacher Evaluation (Reports-Research). Journal of Personnel Evaluation in Education, 11 (1), 57-67.
- Yusuf, K. (2002). The Need for Environmental Education in the Teacher Education Programme. Downloaded from <http://www.helda.helsinki.fi>.
- Yvonn, D., & Volodin, V. (2007). Human Rights in Education, Science and Culture. Legal Developments and Challenges. Ashgate Publishing Company, Burlington, USA.
- (<https://soapboxie.com/social-issues/The-Implementation-o-the-K-12-Program-in-the-Philippine-Basic-Education-Curriculum>).

Appendix A. An example appendix

Authors including an appendix section should do so after the References section. Multiple appendices should all have headings in the style used above. They will automatically be ordered A, B, C etc.

A.1. Example of a sub-heading within an appendix

There is also the option to include a subheading within the Appendix if you wish.