



LEARNING MANAGEMENT SYSTEM SCHOOLGY: ITS EFFECT ON STUDENTS' TECHNICAL WRITING SKILLS

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Abstract

The primary aimed of this study is to determine the effectiveness of the Learning Management System (LMS) Schoology as regards enhancing the proficiency of the college students in technical writing. Adopting the experimental method of investigation, the study has involved forty-five (45) college students enrolled in EN 121-Writing in the Discipline with the descriptive title Scientific Research and Business Communication at Cotabato City State Polytechnic College, Cotabato City, Philippines. The researcher chose the said subjects using the pretest and post-test inclusion rubrics formulated as their basis for rating. A teacher-made test duly validated by several experts in the field of English language teaching served as the primary instrument of this study. The research tools used by the researcher largely depends on the sincerity, thoughtfulness and objectivity of the respondents. In treating the study, the researcher used the descriptive statistics particularly the frequency count, mean and percentage to answer the problems 1 and 2 and for Problem 3, the t-test was utilized to find out whether the relationship between the students' performance in technical writing before and after the use of Learning Management System Schoology is used. This confirms that the proficiency of the subjects in Technical Writing can be further enhanced through the LMS Schoology. Overall, the findings suggest that teachers should utilize the LMS Schoology only as a supplement to the traditional method of teaching to enhance the college students' proficiency in Technical writing.

Keywords: Learning Management System, Schoology, Technical Writing, Cotabato City

INTRODUCTION

Good communication is essential for life in general but in business settings it is critical (Velez, 2014).

The aforesaid statement clearly presages the vital role of Technical Writing among professionals. Technical Writing is one of the subjects in higher education that aims to develop the students' ability to convey or transmit relevant business information in and out of the organization through the discussion of various forms of correspondence such as reports, memoranda, proposals and other forms of writing intended for business pursuits. The subject comes in several nomenclatures such as Business Communication, Business Correspondence, Writing for Business and the like depending on the institution where it is offered. Most of the time, the subject is embedded in the Business Communication course in most higher education institutions as an essential component of the General Education

Curriculum (GEC) requirement prior to graduation as approved by the Commission on Higher Education (CMO No. 48, 2012).

Learning and honing technical writing skills can have a positive impact on an individual's career advancement. Effective channels of communication make an organization run smoothly. Professional quality writing being sent through these channels improves productivity and the ability of all functional areas to work together, particularly in an increasingly global workplace where collaboration is the norm (Hill, 2014). Undoubtedly, the ability to compose or write all forms of business communication opens the doors of countless opportunities to aspiring professionals of the 21st century.

Along with the need to enhance the writing skills of the students is the need to increase the level of their familiarity in the English language. Bindu Rana (2014) in her article entitled, "Enhancing Students' English Proficiency" clearly stated: "English is one of the most widely spoken languages in the world and its value has expanded enormously in the past decade due to increasing demand of English

language in jobs, growing social mobility and global competitiveness." Individuals who have a good command of the English language as manifested in their oral and written communication are highly sought after by companies of international repute (Rana, 2014).

Technology has made everyone in the workplace a writer, and writing is a highly visible skill. When you send an email or other written communication, it is out there for people to see. It reflects on you and, if you are an administrative professional, it also reflects on your boss, so it's essential to get it right. Today, your reputation and success in business are increasingly dependent on your ability to communicate well (Business Management Daily, 2013).

As a result, educators strongly suggest that technical writing must be taught effectively among the students in schools to ensure that they will obtain the knowledge, skills and attitudes that they need to cope with the demands of their respective professions. This is to ensure that the writing competency of the students will be further enhanced.

Writing is a core job competency that falls under the broader category of communication and is required in numerous careers world-wide. Due to the prevalence of new technologies, which often require an abundance of writing, solid competencies are sought after more than ever before (Professional Writing Certificate specializing in Business and Technical Writing, 2014).

With regard to pedagogies associated with the teaching of business writing, the traditional method of teaching seems to be popular. Traditional teaching is described as a typical class having one teacher who directs all activities, and presents knowledge in discrete parts to be passively ingested by students and to be recalled later on a test. Garcia (1997) characterizes traditional teaching as follows: 1. This method calls for teacher's monopoly of the teaching-learning process. 2. This usually limits the class activity within the four walls of the classroom. 3. It opts for conformity, thus expecting each student to come up with the predetermined learning results. 4. Stresses the "what" of learning, thus capitalizing on the use of memory work, question and answer method, etc. 5. Problems seem to be insurmountable causing the

teacher to bog down in his teaching 6. Stresses the acquisition of knowledge among other things; hence, the instruction becomes subject matter oriented (www.openuni-clsu.edu.ph/openfiles/modules/ed710/lesson5-1.doc)

In the website www.learnnc.org, Hogbood (2014) cited the definition given by R. Garrison & H. Kanuka (2004) on blended learning. According to the said authors, blended learning is a student-centered approach to creating a learning experience whereby the learner interacts with other students, with the instructor, and with content through thoughtful integration of online and face-to-face environments.

Over the past decade or so, powerful software for managing complex databases has been combined with digital frameworks for managing curriculum, training materials, and evaluation tools particularly in blended learning. The result is a technology known as the Learning Management System or LMS (Mindflash, 2013).

A learning management system (LMS) is a software application or Web-based technology used to plan, implement, and assess a specific learning process. Typically, a learning management system provides an instructor with a way to create and deliver content, monitor student participation, and assess student performance. A learning management system may also provide students with the ability to use interactive features such as threaded discussions, video conferencing, and discussion forums (Rouse, 2005).

The LMS has become a powerful tool even for consulting companies that specialize in staffing and training, extension schools, and any corporation looking to get a better grasp on the continuing education of its workforce. Its impact has been felt mostly outside of traditional education institutions, though the same technological and market forces are dramatically changing today's classroom as well (Mindflash, 2013).

The use of learning management systems in the classroom may enable the faculty members to enhance their tools for working-the use of information and communication technologies, one of the 21st century teaching skills enumerated by Vivien Stewart, Senior Education Advisor of the Asia Society during her talk in the Philippine Education Conference 2013 held last December 2-3, 2013 at SMX Convention Center, Pasay City.

In the midst of the positive reviews about Schoology, the researcher wants to investigate further the effectiveness of the students' technical writing skills via Learning Management System: Schoology.

METHODOLOGY

Of the various methods of research, the researcher has employed the experimental pretest and post-test design. The said method attempts to maintain control over all factors that may affect the result of an experiment. In doing this, the researcher attempts to determine or predict what may occur (Experimental Research, 2014). Furthermore, the experimental is a blueprint of the procedure that enables the researcher to test his hypothesis by reaching valid conclusions about relationships between input, the process and the output. It refers to the conceptual framework within which the experiment is conducted.

The study was conducted in Cotabato City State Polytechnic College (CCSPC) particularly the College of Business and Public Administration.

The Cotabato City State Polytechnic College is a public college in the Philippines. It is mandated to provide professional and advanced vocational instruction and training in agriculture, fisheries, forestry, engineering and industrial technologies. It is also mandated to promote research, advanced studies, and progressive leadership in its field of specialization.[1] Its main campus is located in Cotabato City.

On July 27, 1981, Principal Payakan G. Tilendo with the support of his faculty and staff including the local and national government conceived the idea of converting CCNHS into a polytechnic college due to the tremendous increase of student population. Hence, on December 12, 1981 Hon. Kharis M. Baraguir, Vice Governor of Maguindanao Province who was during that time

the President of Class 1953 Cotabato High School Alumni Association wrote a letter of appeal to President Ferdinand E. Marcos for the conversion into a state college which was strongly supported by Resolution No. 1, s. 1981 of Class 1953 of the Cotabato High School. Thru the power of prayer and with the guidance, grace and mercy of the Divine Providence, involving the strong support of Region XII assemblymen in the House of Representatives led by Hon. Datu Blah T. Sinsuat, Anacleto Badoy, Ernesto Roldan and Tomas Baga; Batas Pambansa 484 entitled, "An Act Converting the CCNHS into Cotabato City State Polytechnic College (CCSPC), and Appropriating Funds Thereof" was finally passed by the BatasangPambansa as approved by House Speaker Querube C. Makalintal and approved by the late Philippine President Ferdinand E. Marcos on June 10, 1983.

Today, Republic Act No. 10585 was passed in the House of Representatives and the Senate on February 6, 2013 mandating the conversion of the CCSPC into a state university to be known as the Cotabato State University was approved by His Excellency President Benigno Simeon C. Aquino on May 24, 2013.

RESULTS AND DISCUSSIONS

Table 1

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance Before the Learning Management System Schoology is Use in Terms of Application Letter

Range of Score	Frequency	Percentage %	Description
90 and above	3	6.67	Very Good
85-89	5	11.11	Good
80-44	9	20.0	Average
75-79	8	17.78	Poor

74 and below	20	44.44	Very Poor
Total	45	100	
Mean= 78.64 (Poor)			

The data shows that the highest score falls in the range of 90 and above described as very good. In this score category, only 6.67 percent has obtained this score. Meaning these students met the exemplary level wherein it accurately uses correct business letter format, it clearly states the purpose, facts are clearly explained, appropriate for the intended audience, used correct spacing, font and format and accurate use of punctuation, grammar and no spelling errors.

In the score range of 85-89 labeled as Good, only 5 or 11.11 percent has obtained the score. This indicates that only few of the students mostly uses correct business letter format, it clearly states the purpose, somewhat hard to follow, letter typed with few problems in spacing, font and format, few errors in spelling, punctuation and grammar.

Further, another 9 or 20.0 of the students got the score in the range of 80-84 described as average level. This means that these students have some noticeable errors in use of correct business letter format, the purpose of the letter is unclear, it is hard to follow, the tone is too formal or informal for intended audience, frequent problems in letter typed and there are mistakes in punctuation, grammar with more than two spelling errors.

For the range of 75-79, only 8 or 17.78 percent described as Poor. The result is a manifestation that these students have several noticeable errors in use of correct business letter format, the purpose of the letter is unclear, the main idea is unsupported by facts, the letter rambles and hard to understand, the tone is inappropriate for intended audience, the format used is wrong and there are errors in punctuation, grammar and spelling.

In the same table, 20 or 44.44 percent has obtained the score in the range of 74 and below described as very poor. The result indicates that the students have performed poorly in application letter writing. This implies that these students did not meet the criteria for organization, content, appearance and language usage.

Considering all the scores of the learners, it obtained the overall mean score of 78.64 described as Poor. The data in general reveal that the students performed poorly in writing application letter. Bloom (1968) proposed that the learners should be given additional support in learning and reviewing if the learner does not achieve mastery on the test.

Table 2

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance Before the Learning Management System Schoology is Use in Terms of Resume Writing

<i>Range of Score</i>	<i>Frequency</i>	<i>Percentage %</i>	<i>Description</i>
<i>41-50</i>	<i>2</i>	<i>4.44</i>	<i>Very Good</i>
<i>31-40</i>	<i>34</i>	<i>75.56</i>	<i>Good</i>
<i>21-30</i>	<i>9</i>	<i>20</i>	<i>Average</i>
<i>11-20</i>	<i>0</i>	<i>0</i>	<i>Poor</i>
<i>1-10</i>	<i>0</i>	<i>0</i>	<i>Very Poor</i>
<i>Total</i>	<i>45</i>	<i>100</i>	
Mean= 33.94 (Good)			

The grade of the students in writing resume is shown in Table 2. The data shows that the range of 41-50 with the frequency of 2 or 4.44 percent labeled as Very Good. The result indicates that the learners at this level have developed the fundamental knowledge and skills and core understandings. The result further suggests that these learners can assist their classmates in the class.

Almost three fourth of the class obtained the range of grade 31-40 with 75.56 percent labeled as Good. The result manifested that the learners are aware of the fundamental knowledge and understanding of the test. And this indicates the students are nearly on moving towards mastery.

In the grade range of 21-30, labeled as average, 20 percent has obtained this score. The result shows that the learners still need reinforcement from their teachers or a necessity for a new instructional medium to reach the level of mastery.

In the same table, the data shows that no students got the grade range of 11-20 and 1-10 labeled as poor and very poor. In these levels, would mean that learners struggle with their understanding, prerequisite and fundamental knowledge and/or skills have not been acquired or developed adequately to aid understanding.

Considering all the scores of the learners, it obtained the overall mean score of 33.94 described as Good. The data in general reveal that the students performed good in writing resume. Therefore, few necessary enrichment are needed to reach the level of mastery.

Table 3

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance Before the Learning Management System Schoology is Use in Terms of Memorandum Writing

<i>Range of Score</i>	<i>Frequency</i>	<i>Percentage %</i>	<i>Description</i>
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41-50	0	0	Very Good
31-40	3	6.67	Good
21-30	41	91.11	Average
11-20	1	2.22	Poor
1-10	0	0	Very Poor
Total	45	100	
Mean= 25.94 (Good)			

The grade of the students in writing memorandum before the use of Learning Management System Schoology is shown in Table 3. The data shows that no one got the grade in the range of 41-50 and above, it is manifested that the learners did not reach the highest possible grade in class described as Very Good.

In the grade range of 31-40, only 3 or 6.67 percent obtained this score which is described as Good, this means that only few of the students developed the fundamental knowledge in memorandum writing.

Further, almost three fourth of the class scored 21-30 with 41 or 91.11 percent described as Average. Meaning, these students attained average level which is an indicator that they are somewhat moving in the mastery level in memorandum writing.

In the same table, only 1 got the score range of 11-20 with 2.22 percent labeled as poor. This means that the student need rigorous instruction from the instructor.

Further, there are no student scored in the range of 1-10 which is described as Very Poor. This explains that almost all of the student understand the fundamentals of writing memorandum.

Considering all the scores of the learners, it obtained the overall mean score of 25.94 described as Average. The data in general reveal that the students performed average level in writing memorandum. It is a manifestation that there only few necessary improvements are needed to reach the level of mastery.

Table 4

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance Before the Learning Management System Schoology is Use in Terms of Minutes of Meeting Writing

Range of Score	Frequency	Percentage %	Description
90 and above	0	0	Very Good

85-89	1	2.22	Good
80-44	0	17.78	Average
75-79	0	97.78	Poor
74 and below	44	97.78	Very Poor
Total	45	100	
Mean= 74.29 (Very Poor)			

The grades of the student in writing Minutes of Meeting is shown Table 4. The data clearly shows that there are no students who got the highest possible score which is 90 and above with the description of very good. This means that there are no students who exemplary reach this cognitive level. It is also shown that the highest grade falls in the range of 85-89 described as Good. In this score category, only 2.22 percent of the students obtained this score. The result indicates that the learners at this level have developed the fundamental knowledge and skills and core understandings and only few measures are needed to reach the mastery level.

In the grade range of 80-44, there are only 20 percent obtained this score, with the description of Average. This indicates that only few among students who are in average level. It further explains that there is a necessity for additional instructional materials that may contribute to their enrichment.

Further, another 17.78 percent falls in the range of 75-79 with the description of Poor. This specifies that same as the average, it also needs more approaches in teaching the fundamentals of minutes of meeting writing.

In the same table, almost everybody in the class obtained the score of 74 and below with 44 or 97.78 percent. This concludes that the students failed in understanding the fundamental knowledge in writing minutes of meeting. Further, these students need help throughout the performance of authentic task.

In addition, the students scores overall mean score is 74.29 labeled as Very Poor. The students at this level did not developed the fundamental knowledge and skills and core understandings in writing the minutes of meeting. The data in general reveal that the students need assistance and motivation from the teacher, parents and peers. Further, it also may suggest a new approach in teaching minutes of meeting writing.

Learners Performance in Technical Writing after the application of Learning Management System (LMS) Schoology

The Learners' range of score, frequency, percentage, and description of the result in application letter before LMS Schoology is presented in Table 5

Table 5

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance After the Learning Management System Schoology is Use in Terms of Application Letter

<i>Range of Score</i>	<i>Frequency</i>	<i>Perentage %</i>	<i>Description</i>
<i>90 and above</i>	<i>7</i>	<i>15.56</i>	<i>Very Good</i>
<i>85-89</i>	<i>9</i>	<i>20</i>	<i>Good</i>
<i>80-44</i>	<i>17</i>	<i>37.78</i>	<i>Average</i>
<i>75-79</i>	<i>12</i>	<i>26.66</i>	<i>Poor</i>
<i>74 and below</i>	<i>0</i>	<i>0</i>	<i>Very Poor</i>
<i>Total</i>	<i>45</i>	<i>100</i>	
<i>Mean= 82.91 (Average)</i>			

The table shows the result of the students in application letter writing after the Learning Management System (LMS) Schoology is applied. The highest possible score 90 and above was obtained by the students with 7 or 15.56 percent labeled as Very Good. This specifies that the students accepted averagely the new approach LMS Schoology.

This is supported by the theory of Husamah (2014, p. 226) revealed that LMS Schoology was able to increase the activity of students outside school hours to explore the material individually and independently. Students could follow the online learning on Schoology using a laptop, personal computer, or smartphone.

In the grade range of 85-89, there are only 9 or 20 percent from the class obtained this. This specifies that only few of the students still need an enrichment to attain the mastery level.

Further, in the score category of 80-44, there 17 or 37.78 percent students have obtained this score labeled as average. Meaning, these learners adopted LMS Schoology averagely. It also explains that students are interested to learn using this application. Further, the result is supported by the research conducted at the Hacettepe University Turkey (Akkoyunlu & Soylu, 2008, p. 188) found that LMS Scoology was able to improve the provision and development of more theoretical material to students. Students gave positive feedbacks and greatly appreciated to the learning process by using Schoology.

In the same table, the score range of 75-79, there are 12 or 26.6 percent students obtained this. This grade range describes as Poor. This means that one fourth of the class did not understand yet the fundamentals of schoology in terms of writing application letter.

Further, there are no students got the grade range of 74 and below that marks as Very Poor. This implies that all students are adopting schoology as a means of instruction in terms of writing application letter.

The application writing performance of the students after the LMS Schoology is used has a mean score of 82.91 labeled as Average. Meaning, the students adjusted with the new learning environment.

As compared to the pre-test result, it has a mean score of 78.64 labeled as Poor, it generally reveal that LMS Schoology becomes a factor for the students to understand the fundamentals of application letter.

This was supported by the theory proposed by Husamah (2014, p. 226) revealed that: (1) Schoology was able to make the development of students' learning process better than the models of face to face learning; (2) Schoology was able to provide practical and realistic opportunities in independent study, useful, and continued, and (3) flexible toward schedules for students through the incorporation of the best aspects of face-to-face and online learning.

Table 6

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance After the Learning Management System Schoology is Use in Terms of Resume Writ

<i>Range of Score</i>	<i>Frequency</i>	<i>Perentage %</i>	<i>Description</i>
<i>41-50</i>	<i>9</i>	<i>20.0</i>	<i>Very Good</i>
<i>31-40</i>	<i>36</i>	<i>80.0</i>	<i>Good</i>
<i>21-30</i>	<i>0</i>	<i>0</i>	<i>Average</i>
<i>11-20</i>	<i>0</i>	<i>0</i>	<i>Poor</i>
<i>1-10</i>	<i>0</i>	<i>0</i>	<i>Very Poor</i>
<i>Total</i>	<i>45</i>	<i>100</i>	
<i>Mean= 37.50 (Good)</i>			

The table shows the students performance in resume writing after the LMS Schoology is used. The highest possible grade of 41-50 labeled as Very Good was obtained by 9 or 20 percent of the students. This implies that 20 percent of the students accepted the LMS Schoology in terms of resume writing.

Further, 80 percent of the students obtained the grade range of 31-40, the second highest possible score. Labeled as Good with the frequency of 36. Meaning, the application LMS Schoology is a factor to understand the core understanding and fundamental knowledge and skills of resume writing.

In the same table, there are no students who obtained the grade range of 21-30, 11-20 and 1-10 labeled as average, poor and very poor respectively. The result showed that the influence of LMS Schoology to the learning outcome proved not to rely on prior knowledge that students had. LMS Schoology could improve the overall students' learning outcome in all categories of prior knowledge.

Considering all the results, it obtained the mean score 37.50 percent marked as Good. It means that LMS Schoology was proven to improve the performance of the students in the classroom. In line with study found Sjukur (2012, p. 375), students that used LMS Schoology had 77.58 as the average learning outcome.

Meanwhile for the class which used face-to-face learning had 60.32 as the average learning outcome.

Table 7

Frequency, Percentage and Description Distribution of Students' Technical Writing Performance After the Learning Management System Schoology is Use in Terms of Memorandum Writing

<i>Range of Score</i>	<i>Frequency</i>	<i>Percentage %</i>	<i>Description</i>
<i>41-50</i>	<i>1</i>	<i>2.22</i>	<i>Very Good</i>
<i>31-40</i>	<i>41</i>	<i>91.11</i>	<i>Good</i>
<i>21-30</i>	<i>3</i>	<i>6.67</i>	<i>Average</i>
<i>11-20</i>	<i>0</i>	<i>0</i>	<i>Poor</i>
<i>1-10</i>	<i>0</i>	<i>0</i>	<i>Very Poor</i>
<i>Total</i>	<i>45</i>	<i>100</i>	
<i>Mean= 37.50 (Good)</i>			

The table shows the students performance in memorandum writing after the LMS Schoology is used. Only 1 or 2.22 percent of the class obtained the highest possible score range of 41-50 labeled as very good. This implies that there is only 1 student who reach the mastery level of writing memorandum.

In the grade range of 31-40, almost three fourth of the class obtained this with 91.11 percent. It is a manifestation that students at this level have developed the fundamental knowledge and skills and core understanding of memorandum writing thru the use of LMS Schoology.

Further, only 6.67 percent of the students obtained the score range of 21-30. This signifies that these students attained the average level which is an indicator that the students are nearly moving towards the mastery level.

In the same table, the score range of 11-20 and 1-10, there are no students obtained it, labeled as Poor and Very Poor respectively.

Considering all the results, it obtained the mean score of 35.06 labeled as Good. The data in general reveal that the students have performed Good in writing memorandum thru LMS Schoology.

The result is supported by the theory of McLuhan truly makes sense in the current study for it proves that the technology evolves as in the case of the Learning Management Systems such as Schoology, which enables collaboration among individuals bringing them together in one high-tech community. This is entirely different from the traditional mode of learning that gives emphasis on rote memorization obtained from the lecture or “the chalk and talk” method. At present, learning focuses in the so called collaboration among students and teachers at any point in time and place.

On the other hand, Jeff Dun (2012) in his article entitled, “20 Surprising Stats About Technology Use in College,” reported that with technology, the landscape of college education has done a complete turnaround. Gone are the days of notebooks, printed syllabi and textbooks. Now it’s iPads, smartphones and ebooks. He revealed based from a sample size of 500 college students that 73 percent of them cannot study without technology while 70 percent use keyboards to take down notes. On the other hand, 38 percent of the students cannot go 10 minutes without checking their email, laptop, tablet or smart phone. Surprisingly, 91 percent of the college students used email as a form of communication to their professors while 98 percent who own an ereader read etextbooks. Finally, 65 percent use digital devices to create presentations. It was also reported in 2009, students spent 13 billion U.S. dollars on electronics.

Table 8

Frequency, Percentage and Description Distribution of Students’ Technical Writing Performance After the Learning Management System Schoology is Use in Terms of Minutes of Meeting

<i>Range of Score</i>	<i>Frequency</i>	<i>Percentage %</i>	<i>Description</i>
<i>41-50</i>	<i>0</i>	<i>2.22</i>	<i>Very Good</i>
<i>31-40</i>	<i>1</i>	<i>91.11</i>	<i>Good</i>
<i>21-30</i>	<i>1</i>	<i>6.67</i>	<i>Average</i>
<i>11-20</i>	<i>11</i>	<i>0</i>	<i>Poor</i>
<i>1-10</i>	<i>32</i>	<i>0</i>	<i>Very Poor</i>
<i>Total</i>	<i>45</i>	<i>100</i>	
<i>Mean= 37.50</i>			

(Good)			
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The table shows the students performance in minutes of meeting writing after the LMS Schoology. The highest possible score range of 41-50 only 2.22 percent of students obtained it, labeled as Very Good. This implies that in terms of Minutes of Meeting writing, the students did not reach the level of mastery.

In the same table, the score ranges 31-40 and 21-30 labeled as Good and Average respectively, there are only 1 student obtained this. This signifies that the students are having a hard time in understanding the fundamental knowledge in writing minutes of meeting.

In the grade range of 11-20, there are 6.67 percent of students obtained it which is described as Poor. Further, in the score category of 1-10 labeled as Very Poor, there are 32 or 91.11 percent students obtained this.

Considering all the result, it obtained a mean score of 75.20 which is described as Poor. Meaning the students did not accept the LMS Schoology in terms of Minutes of Meeting writing.

This suggest that minutes of meeting writing cannot depart entirely from the influence of traditional teaching as most of the respondents are still depenedent on the direct instruction provided by the instructor. Since minutes of meeting needs more elaborate discussions and period of consultation, the assistance of the instructor is greatly needed. This findings coincides with the article pulished in the Education Portal which states that the “Traditional classes may be a better choice for students who are not very savvy with technology or who enjoy interacting with teachers and professors face to face.”

Table 9

Comparison of Students’ Technical Writing Performance Before and After the Learning Management System Schoology is Used

Technical Writing Parameter	Compared Variable	ΣD	ΣD^2	Computed t-value	Description
Application Writing	Before LMSS	335	3364	11.220	Significant
	After LMSS				
Resume	Before LMSS	205	1065	17.700	Significant
	After LMSS				

Memorandum	Before LMSS	336	2768	20.640	Significant
	After LMSS				
Minutes of Meeting	Before LMSS	958	22918	18.860	Significant
	After LMSS				

Legend: Computed t to be significant at 5% level should be at least ± 2.016 with degrees of freedom of 44

N= Total number of students

$\sum D$ = The algebraic sum of the difference between the Pretest and Posttest Scores.

$\sum D^2$ = The algebraic sum of the square of the difference between the pretest and posttest scores.

The Table presents the result of the comparison of students' technical writing performance before and after the Learning Management System Schoology.

In the Application letter, the compared t-value of 11.1220 with the $\sum D$ 335 and $\sum D^2$ of 3.364 described as Significant. This means that there is a significant relationship between the students' performance in application letter before and after the use of Learning Management System Schoology.

Further, this also explains that LMS Schoology could be an instructional medium in teaching the fundamental knowledge skills and core understanding of application letter.

In the Resume writing, the compared t-value of 17.700 with the $\sum D$ 205 and $\sum D^2$ of 205 described as Significant. This means that there is a significant relationship between the students' performance in resume writing before and after the use of Learning Management System Schoology.

The result implies while the old pedagogy of learning still exist, it should now be noted that the learning theories for the digital age are introduced by modern education scholars making the task modern day teachers even more challenging.

This further explains that the students are more enjoying the use of schoology in learning business letters.

This is supported by Prensky (2005) in his article entitled, "Teaching Digital Natives: Partnering for Real Learning," accentuated that teachers should prepare their students for their long-term future—as well as for tomorrow—while at the same time preserving the important legacy of the past. The way for teachers to succeed under such conditions is not to focus only on the changing technology, but rather to conceptualize learning in a new way, with adults and young people each taking on new and different roles from the past. Young people (students) need to focus on using new tools, finding information, making meaning, and creating. Adults (teachers) must focus on

questioning, coaching and guiding, providing context, ensuring rigor and meaning and ensuring quality results. It could be implied from the insights provided by Prensky that educational success cannot be attained in the mere use of modern technologies but rather a more systematic and meaningful approach in the delivery of instruction is a requirement towards that end.

In the memorandum, the compared t-value of 20640 with the $\sum D$ 336 and $\sum D^2$ of 2,768 described as Significant. This means that there is a significant relationship between the students' performance in writing memorandum before and after the use of Learning Management System Schoology.

This implies that there is a significant relationship between the students' performance before and after LMS Schoology is used.

The findings, revealed that LMS Schoology has shown a potential in enhancing the proficiency of these college students in writing memorandum. This also justifies the theory of Husamah (2014, p. 226) revealed that: (1) Schoology was able to make the development of students' learning process better than the models of face to face learning; (2) Schoology was able to provide practical and realistic opportunities in independent study, useful, and continued, and (3) flexible toward schedules for students through the incorporation of the best aspects of face-to-face and online learning.

In the Minutes of Meeting, the compared t-value of 18.860 with the $\sum D$ 958 and $\sum D^2$ of 22, 918 described as Significant. This means that there is a significant relationship between the students' performance in writing minutes of meeting before and after the use of Learning Management System Schoology.

Overall, the findings revealed that the LMS Schoology has shown a potential in enhancing the proficiency of college students in Business Writing as evidenced by the performance of the subjects from the result of Pre-test and Post-test. The key advantage to using Schoology probably is the increase in engagement between the instructor and the students anytime and anywhere especially in their Business Writing lessons. Schoology engages students more in learning since both parties can send and reply to messages instantly made possible through the popular mobile gadgets such as laptops, mobile phones, tablets etc. Unlike the traditional method, Schoology enables the teachers to monitor the progress of their students even outside the classroom regularly thus establishing a more consistent performance in Business Writing. Innovative methods such as the use of the LMS Schoology are more student-centered giving more opportunities for the learners to explore more of their skills at their own pace beyond the walls of the classroom hence developing their creativity, resourcefulness and critical thinking skills among others which are pertinent to the 21st century skills.

Likewise, the results of the study showed that all technical writing are still in the state of familiarizing themselves as regards the use of Learning Management Systems like Schoology. Though most of them are considered digital learners, they still need the direct assistance of the instructors as they make business correspondence hence preferring the traditional method of instruction. Despite of this, the LMS Schoology has proven its potential in enhancing the proficiency in Technical Writing among the students in college

since the subjects in the experimental group had exhibited a performance over the pre-test.

Summary of Findings;

Based on the data, the study generated the following findings:

1. The students performance in application letter is Poor with 78.64 mean before the use of LMS Schoology and eventually got Average with 82.91 mean after the use of Learning Management System Schoology.
2. The students performance in Resume writing is both Good before and after Learning Management System Schoology is administered. With the mean score of 33.94 and 37.50 respectively.
3. The students' performance in writing Memorandum has a mean grade of 25.94 labeled as Average before the use of Learning Management System Schoology and 35.06 labeled as Good after the use of Learning Management System Schoology.
4. The students' performance in writing Minutes of Meeting has a mean grade of 74.29 described as Very Poor before the use of Learning Management System Schoology and a mean grade of 75.20 described as Poor after the use of Learning Management System Schoology.
5. There is a significant relationship between students' performance in Technical Writing before and after the use Learning Management System Schoology.
6. Learning Management System Schoology is an effective mean of teaching technical writing among college students when used as a supplement to the traditional method.

Conclusion

Based on the findings of the study that the researcher conducted that Learning Management System Schoology is an effective method in teaching technical writing in terms of Application letter, resume writing, memorandum and minutes of meeting.

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