

### Effectiveness Of Calibrating Action for Lifelong Learning to Upstage Pandemic (Call Up) Approach on Pupils' Academic Performance

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*Abstract* — This study investigated the effectiveness of Teachers' Calibrating action for Lifelong Learning to Upstage Pandemic (Call Up) Approach on pupils' academic performance specifically in English, Mathematics and Science. The quasi-experimental method of research was employed to investigate the effectiveness of CALL UP Approach to improve learners' performance in English, Math and Science. This pre-posttest design makes use of two group of learners with almost similar characteristics. The learners were divided into two groups to compose the control and experimental groups. The control group were subjected to the usual treatment. Meanwhile, the experimental group were subjected to CALL UP Approach composed of home visits, small group community teaching, scaffolding and feed backing. The results yielded significant difference on the mean gain score between the control and experimental groups implying that the Call Up Approach is more effective in improving the pupil's academic performance in English, Math and Science than the previously available learning model of delivery. The Call Up Approach as an intervention program is found effective to improve the learner's academic performance as revealed in this study.

Keywords — CALL UP Approach, Lifelong Learning, Upstage Pandemic, Learning Activity Sheets (LAS), Home visits, Small-group community teaching, Feedbacking, Control Group, Experimental Group

#### I. Introduction

The public health crisis has altered the educational systems of various countries including the Philippines. School closures have led to the adoption of distance education which separates the learners from the support of the teacher. In distance education particularly in modular distance learning, learners are largely dependent of more knowledge others at home which serve as home learning facilitators. COVID-19 pandemic has resulted drastic changes in education. Part of it is the shift from face-to face classes to different learning modalities which include the use of Self Learning Modules. Since education is believed to continue despite the circumstances, teachers started to prepare for modular learning.



Along this line, it is noted that this change of time calls for the paradigm shift of schools to offer different platforms but with the same level of competency and understanding. The Department of Education (DepEd) issued an Order to follow in terms of the Basic Education Learning Continuity Plan for School Year 2021 in Light of the Covid-19 Public Health Emergency which says no face-to-face classes until safe. It also states that DE refers to a learning delivery modality where learning takes place between the teacher and the learners who are geographically remote from each other during instruction. This year, the schools offer different learning modalities namely: Modular Distance Learning (MDL); Online Distance Learning (ODL); and Television (TV)/Radio-Based Instruction. These are different platforms that learners chose based on the surveys conducted by the schools before the opening of classes last October 2020.

Moreover, different online learning platforms are also considered useful for teaching and learning engagement. Thus, the urgent needs of educators and learners evolve when considering the quality of instructions. It is crucial to understand and get a deeper insight into trends and issues in DE to keep abreast of these constant changes. Distance Education may seem very significant nowadays, specifically to those learners who can't go to school for their face-to-face class. Hence, this significant factor has uncertainties as regards to the misuse of the technology, the attitudes of learners, since students tend to procrastinate and bully teachers, administrators' behavior and competencies and most of all the quality of instructions.

Further, it was clearly observed that all throughout the conduct of modular distance learning, the parents who usually serve as home learning facilitators have echoed that they have found the new normal of education as stressful and frustrating as they also are struggling with their daily living. Parents whose education is low have affirmed that they were not capable enough to teach their children were afraid of teaching wrong things to their children. In addition, they have echoed that their submitted outputs do not get adequate feedback from the teachers. They do not know if their children have submitted correct answers or not. Parents on the other hand, mentioned that among the subjects, they find teaching English, Math and Science difficult.

Undeniably, global assessment Trends in International Mathematics and Science Study 2019 revealed that the Philippines lags behind 57 other countries in Math and Science achievements, the study also reported that less than 50 percent of Grade 4 learners only were receiving instructions with "high clarity", as reported in Manila Standard.net, in November 23 issue. Clearly, the difficult experiences of teachers and students in carrying out the teaching learning processes during this pandemic could possibly will likely widen this disparity after the pandemic.

On the other hand, communication skills which definitely is manifested in the learners' ability to communicate in English has been an advantage of Filipinos in the workforce. However, employers have slowly recognized that this advantage has been waning in time. According to Manila Times (https://www.manilatimes.net/2021/01/21/) a secondary school teacher in Zamboanga City noted that during the 2019 Programme for International Student Assessment



(PISA), the Philippines, among 79 participating countries, scored the lowest in reading comprehension. This is where the teacher's role becomes crucial in developing literacy of his/her students, specifically developing and applying various strategies that would ascertain learners' proficiency of the skills which would definitely be shaped at a younger age. Thus, if the findings revealed in the mentioned assessment cover the time of normal face to face classes, the more sensitive we should become to this problem at hand. One should not undermine the need to calibrate language education from the early years of formal education, and it is a must for every Filipino teacher to respond to this crisis in basic education particularly on the three major areas of English, Mathematics and Science in the basic education curriculum.

On that note, the researcher who is also a teacher feels that there is a need to focus more on developing functioning intervention activities or action to address the issues surrounding the conduct of distance education and specifically the reason why the need to conduct this study is very important to appropriately asses the intervention program now practiced in the field. That is definitely the focus of this study.

As a teacher, one has to develop strategies that would aid and ascertain learning during this pandemic. With this, to help her learners, the researcher has designed an intervention called CALL UP (Calibrating Action for Lifelong Learning to Upstage Pandemic) APPROACH. This approach stems from the idea of calling the attention of every individual learner through intervention activities that would help strengthen their learning styles in the areas of English, Math and Science as the main focus in this study to overshadow the difficulties in learning during this pandemic This form of interventional design makes use of strategies to help pandemically-affected learners overcome their learning difficulties in modular distance learning. Strategies include (1) use of Learning Activity Sheets to scaffold learners with concepts and (2) home visits and (3) conduct of individual or small group teaching following health protocols.

As applied in the first quarter of the school year, this intervention is found to be effective based on personal experience by the teacher. However, until a study is conducted and results that would confirm this positive experience applying intervention activities, all claims remain to be an observation and the meaningful strategy will never be shared and communicated to teachers. For this reason, this intervention must be assessed in terms of its effectiveness to improve learners' performance in English, Math and Science. Results of this study is believed to be of great help to other teachers, students and parents who are facing so much difficulties brought in by the distance learning modality adopted during this time of pandemic.

#### **Literature Review**

This section highlights remote learning, small group learning applicable during a pandemic and measurement of academic performance.



#### **Small-Group Learning**

According to the National Association of EMSE Teachers (2020), small group learning is a teaching approach that focuses on a small number of learners working towards shared learning objectives. It can also be described as a team-based approach or cooperative learning since its foundation is that of teamwork and cooperation. This educational approach encourages learners to share and compare their ideas with their peers which allows deeper learning.

In support with this, Johnson and Johnson (2018) have reported in their study that smallgroup learning enables a more active style of learning. According to them, the more active a lesson is, the more students gravitate towards engaging themselves intellectually and emotionally to the learning process. Small-group learning enables learners to maximize their individual and collective learning since it requires them to work cooperatively in achieving joint learning goals.

Aside from a clear benefit in the degree of learning, Skinner et al. (2016) have also found out that students that go through experiential small group learning also developed their interpersonal skills. Despite having a lesser number of learners involved, small group learning encourages more interaction and effective communication amongst learners compared to that in a traditional classroom.

#### **Remote Learning**

In response to the spread of COVID-19, a new coronavirus, many U.S. schools have implemented remote learning. This approach to education can prevent students from experiencing setbacks during school closures.

According to Simonson et al. (2019), there are a lot of challenges that surround the effective implementation of home-based learning. Developing effective instructional strategies is critical in the successful learning of home-based learners. Visualization of ideas and concepts are also crucial on this matter since unlike in a regular classroom where visual aids, materials, and books are readily available to the students, home-based learners do not have the same level of resources that is present in traditional classrooms. Also, support systems must also be made available to home-based learners especially if they transitioned from the traditional classroom to a home-based learning setting.

This has created more challenges as many schools did not have online learning systems in place (Morgan 2020). For example, in the Philippines, the Department of Education (DepEd) implemented remote learning strategies such as online, multi-media, and modular classes. These measures were put in place despite the lack of resources and preparations.

The study adds further to literature confirming that parental involvement strengthens children's engagement in remote learning (Beck, Maranto, and Lo 2014). This highlights the crucial role parents play in the home-based learning of their children (Wai-Cook 2020).



#### **Use of Self-Learning Modules**

Due to limited learning resources, there are a lot of students who have difficulty in learning. An effort that can be done to address this problem is the use of self-learning modules (SLMs). These are printed teaching materials that are designed to be studied independently by participating students. It has been found out that learning outcomes of students who were using SLMs was on average, better than students who were not using them (Rahmawati et al., 2019).

Issues in internet access challenge online modality while the feasibility of radio or television-based modes is disputed as students residing in far-flung areas may remain unreachable, hence, SLMs are seen to be the most applicable and effective learning format (Philippine Information Agency 2020). SLMs are especially designed for learners outside the classroom setting and are equated to textbooks being used in the traditional learning environment (Hernando-Malipot 2021). These modules can be accessed online and offline and are also available in printed format, which is distributed to the parents of the students in designated pickup points in different barangays or villages in the country. Parents submit the accomplished activities in the SLMs to teachers also in designated locations (Magsambol 2020). Unfortunately, some parents are not able to get these modules on time or have failed to get them altogether due to transportation expenses (Abante et al. 2021).

MK Khalil et. Al (2020), suggest that the SLMs have the potential to improve understanding of basic science concepts. SLMs promote independent learning, which is essential in helping novice students who lack the foundation knowledge necessary to process new information. Using SLMs to encourage self-directed learning is consistent with the goal of developing the skills for life-long learning.

The effectiveness and positive student perceptions of SLMs was also reported in the study of Phillips (2016). Most students that have used learning modules in the study were positive on continuing its use. Although it was also stated in Phillips' (2016) study that a blended approach in student learning may have been better received by the students.

#### Academic Performance During Distance Learning

The implementation of distance learning and its influence on students' academic performance has been studied for many years. How students perform academically in a certain learning setting is a major contributor on how experts tweak different elements of a mode of learning in order to improve it or if it is even viable to implement it at all.

In the study of Gossenheimer et al. (2017), it was found out that students performed significantly better in distance education compared to traditional classes. Most of the students reported that they were satisfied with the implementation of distance education and it gives them option of learning at their own pace and motivated them to cooperate more with each other to complete tasks and attain learning objectives. Gossenheimer et al. (2017) suggested that distance



education can be used as a viable and even better replacement for traditional classes if need be, given its promising results and positive feedbacks coming from their participants.

In support to the findings of Armstrong et al. (2020), El Refae et al. (2021), have also reported in their study that students had better academic performance in distance learning compared to face-to-face learning. Their study also reported that the number of students that performed below the satisfactory level in face-to-face learning dropped significantly by 11% when the shift was made to distant learning.

#### **Student Behavior Towards Remote Learning**

According to Phirangee et al. (2016), there is a great need for instructor facilitation in distance learning. In a typical classroom, students are more likely to engage in academic activities since they are being supervised by school personnel, when you take away the physical presence of a supervising entity away from a class, the students can quickly divert their time and attention to other interests that does not involve learning. In their research, they have stated that a higher degree of instructor facilitation in distance learning gave a stronger sense of community with platform and that students participated more in those courses.

Since most students nowadays are now adept in using computers and the internet, the transition to remote learning has been made much easier. Not only does this bode well in terms of implementation, but also in students' academic performance. Prior et al. (2016) have reported that students with a higher level of computer literacy had better attitude towards remote learning and that it also had positive effects on their self-efficacy. This is turn equates to better peer engagement, interaction with the learning management system (LMS), and overall engagement in remote learning. On the other side of the spectrum, students who were not well adept with using computers and the internet tend to get more frustrated and perform worse compared to students with higher levels of computer literacy.

#### **Measuring Academic Performance**

As indicated by Amponsah et al. (2018), in spite of the fact that there is a great deal of strategies utilized to quantify a kid's scholastic accomplishment, normalized accomplishment test remains as quite possibly the most dependable technique since it utilizes target instruments to evaluate abilities and capacities of understudies in certain key territories like information in Mathematics and English Language. These key zones are both acceptable proportions of scholarly execution since Science manages rationale and thinking while capability in the English Language manages perception and education.

It is essential to ensure that the socioeconomic component of human well-being (i.e., security, health, and education) is spread equally across all socioeconomic classes and demographic groups. To put it another way, a good working environment is vital for maximizing productivity. In addition, an efficient design helps individuals preserve their physical and



psychological components (knowledge, motivation, creativity, and social skills). As a result, human capital may be continuously developed. Using ergonomics theories, concepts, information, and methods may improve human well-being and system performance. Ergonomics aims to keep people healthy, comfortable, and safe at work and home (Hoang, et al.,2022).

It is beyond doubt that university rankings have become a significant part of the tertiary education landscape around the globe (<u>Marmolejo, 2015</u>). Indeed, a scientific and general performance measures are required in academia to serve as indicators for justification to the stakeholders that will guide decision-making process.

Therefore, these measurements are foundation for further improvement, which this study adapted, analyzed, synthesized, and made some improvement with empirical validation.

#### II. Methodology

This study employed the quasi-experimental method of research to investigate the effectiveness of Calibrating Action for Lifelong Learning to Upstage Pandemic (CALL UP) Approach to improve learners' performance in English, Math and Science. This pre-posttest design makes use of two group of learners with almost similar characteristics. The learners were divided into two groups to compose the control and experimental groups. The control group was subjected to the usual treatment. Meanwhile, the experimental group will be subjected to CALL UP Approach.





#### **III. Results and Discussion**

The findings and interpretation was based on the data gathered from the study.

#### Problem 1. What is the pretest performances along English, Math and Science of the

#### 1.1 control group; and

#### 1.2 experimental group?

Table 1 summarizes the descriptive statistics for the control and experimental groups' pretest performance. As shown in the table, the English mean for the control group is 12.7368, the highest of the three subjects, with a standard deviation of 2.62133, followed by Science at 12.0000 and a standard deviation of 2.47207, and Math at 10.9474 and a standard deviation of 2.83772. The grand mean and standard deviation of the control group's pre-test are 11.8947 and 2.70373, respectively. Each subject has nineteen score samples, with a total of fifty-seven score samples in the control group's pre-test.

Additionally, the table displays the experimental group's pre-test performance. As shown in Table 1, the English group's pre-test mean is 12.3000 with a standard deviation of 2.93975, the highest of the three subjects, followed by Math at 10.6500 with a standard deviation of 2.34577. Science, by contrast, has a mean of 10.0500 and a standard deviation of 2.99956. The total grand mean and standard deviation of the experimental group's pre-test is 11.0000 and 2.89359, respectively. Each subject in the experimental group has twenty score samples, for a total of sixty score samples in the experimental group's pre-test.

Pre-test performance	s in Science, E	ngiish ana Math in the co	ntroi ana experimeni	ai grou
Control group	Ν	Mean	SD	
English	19	12.7368	2.62133	
Math	19	10.9474	2.83772	
Science	19	12.0000	2.47207	
Total	57	11.8947	2.70373	
Experimental Group	Ν	Mean	SD	
English	20	12.3000	2.93975	
Math	20	10.6500	2.34577	
Science	20	10.0500	2.99956	
Total	60	11.0000	2.89359	

	Table 1
Pre-test performances in Science,	English and Math in the control and experimental group

The result clearly indicates that pupils in both the control and experimental groups perform poorly in mathematics, as indicated by mean scores of 10.9474 and 10.6500, respectively. These findings corroborate Villaver (2014) study, which found that mathematics is the second most difficult subject on elementary and secondary school subject tests, as reported in the Philippine journal of education. Thus, senator Angara, chairman of the senate committee on education, arts,



and culture, attributes the country's poverty to a lack of competence in mathematics, science, and technology.

#### Problem 2. Is there a significant difference on the pretest performances along English, Math and Science between the control and experimental groups?

Table 2 summarizes the pre-test performance of English, Math, and Science subjects in the control and experimental groups. The control groups consisted of 19 sample scores, while the experimental groups consisted of 20 sample scores.

The control group's mean score on pre-tests along English appeared to be 12.7368 with a standard deviation of 2.621, while the experimental group's mean score appeared to be 12.300 with a standard deviation of 2.939. Furthermore, along Math subject, the control group's mean score yielded to be 10.947 with a standard deviation (SD) of 2.838, while the experimental group's mean score 10.650 with a standard deviation value of 2.346. The T-test for independence result along English (t=0.489, p=0.628) and Math (t=0.357, p=0.723) indicates that there is no significant difference in pupils' pre-test performances between the control and experimental groups along English and Math, implying that the null hypothesis is not rejected. This indicates that the pre-test performance of the control and experimental groups are statistically equivalent. Or, equivalently the data did not provide sufficient evidence to conclude that the pre-test performance of pupils along English and Math between control and experimental groups vary statistically.

On the hand, along science subject the control group's mean score of pupils garnered to be 12.000 with a standard deviation of 2.470 while the experimental group's mean score revealed to be 10.050 with a standard deviation of 2.999. It can be inferred from the table, the data yielded a computed T-test value of 2.209 with p-value of 0.033, thus, this leads to the rejection of the null hypothesis. This indicates that the data provide sufficient evidence to conclude that the pre-test performance of pupils along science using the new approach between control and experimental groups is statistically varied significant.

The present finding is supported by the study of Aquino, J. (2017) which revealed that the mean difference of the control and experimental group is 6.65 which indicates that there is a significant difference in the Science performance of intermediate pupils.



# Table 2Test of significance on the pre-test scores along English, Math and Science of the control and<br/>experimental group

Subject	Groups	N	Mean	SD	T-Test	P- value	Result	Decision
English								
	Control	19	12.7368	2.621			Nat	Fail to
	Experimental	20	12.300	2.939	0.489	0.628	Significant	Reject the Null
Math								
	Control	19	10.947	2.838	0.357	0.723	Not Significant	Fail to Reject the Null
	Experimental	20	10.650	2.346				
Science								
	Control	19	12.000	2.470	2 200	0.022	Significant	Reject
	Experimental	20	10.050	2.999	2.209	0.055	Significant	Null

This finding of a low mean score in the pupils' pre-test performance in both the experimental and control groups demonstrates the importance of putting into practice one of Andamon & Tan (2018) recommendations in their study, which states that teachers, school administrators, and parents should collaborate and strive to achieve great academic achievements for everyone, especially the learners.

#### Problem 3. What is the posttest performances along English, Math and Science of the

#### 3.1 control group; and

#### 3.2 experimental group?

Table 3 summarizes the post-test performance of the control and experimental groups. As shown in the table under the control group, the mean for Science post-test is 32.2632 with a standard deviation of 2.25689, the highest of the three subjects, followed by Math at 31.0000 with a standard deviation of 3.48010 and English at 27.0526 with a mean of 3.34122. Each subject has nineteen score samples, and the experimental group's pre-test contains a total of fifty-seven score samples.



		Table 3						
Post-test performances in Science, English and Math of the control and experimental group								
Control group	Ν	Mean	SD					
English	19	27.0526	3.34122					
Math	19	31.0000	3.48010					
Science	19	32.2632	2.25689					
Total	57	30.1053	3.75920					
<b>Experimental Group</b>	Ν	Mean	SD					
English	20	33.7000	3.43511					
Math	20	37.0500	2.48098					
Science	20	36.7500	2.24488					
Total	60	35.8333	3.12001					

Additionally, the table displays the experimental group's post-test performance. Math has the highest mean of 37.0500 and the highest standard deviation of 2.48098, followed by Science with a mean of 36.7500 and a standard deviation of 2.24488 and English with a mean of 33.7000 and a standard deviation of 3.43511. Each subject received twenty score samples, for a total of sixty score samples in the pre-test for the experimental group.

The table 3 demonstrates this small difference in post-test performance between the control and experimental groups. This finding corroborates Hunstsinger et al. (2016) assertion about the critical role of parents in the successful implementation of home-based learning. Additionally, they emphasized that the more parents participate in their children's home-based activities, the more likely learners will perform academically well.

## Problem 4. Is there a significant difference on the posttest performances along English, Math and Science between the control and experimental groups?

Table 4 summarizes the post-test performances of English, Math, and Science subjects in the control and experimental groups. The control groups consisted of 19 score samples, while the experimental groups consisted of 20 score samples.

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Subject	Groups	N	Mean	SD	T-Test	P- value	Result	Decision		
English										
	Control	19	27.053	3.341	C 101	6 121 0	C 121 0 00	0.000	Very	Reject
	Experimental	20	33.700	3.435	-0.121	0.000	Significant	Null		
Math										
	Control	19	31.000	3.480	-6.277	6 277 0.00	0.000	Very	Reject	
	Experimental	20	37.050	2.481		/ 0.000	Significant	Null		
Science										
	Control	19	32.263	2.257	-6.223	0.000	Very	Reject		
	Experimental	20	36.750	2.245		-0.223	0.000	Significant	Null	

Table 4Test of significance on the post-test performances along English, Math and Science of the<br/>control and experimental group

The control group's mean score on post-test performance across the three subjects appeared to be 27.053 while the experimental group's mean score appeared to be 33.700 in English; along Math it yielded a group mean score of 31.000 while the experimental mean score of 37.050; further along Science the group mean score it appears to be 32.263 while in the experimental group's mean score appeared to be 36.750. The fact that the T-Test for Independent Samples had a negative value (T-test<sub>English</sub> = -6.121; T-test<sub>Math</sub> = -6.277; T-test<sub>Science</sub>=-6.223) indicates that the group exposed to the Call Up Approach scored higher. Additionally, the increase was quite significant, as evidenced by the p- value of  $0.000^{**}$ . This implies that the Call Up Approach was an effective intervention in the pupils of San Juan Elementary School specially during this time of the pandemic. This further implies that Call Up approach is more effective than of the previously available learning model of delivery and thus, the null hypothesis should be rejected.

This finding supports Genc (2016) and Carter et al (2020) in their assessment of the positive relationship between children in remote learning and the academic performance of the learners. Furthermore, the study of Perez, B. & Tenorio, L. (2013) support also the present finding which showed that the performance of participants in the post-test result is in favor of the treatment group (Out-of-Class Language Learning, OCLL) program.

Problem 5. Is there a significant difference on the pre-posttest scores along English, Math and Science of the:

- 5.1 control group; and
- 5.2 experimental group?



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<i>T-test of significance on the prepost-test scores along English, Math and Science of the control group</i>								
Groups	Mean	N	SD	T-Test Paired Samples	Sig. (2- tailed)	Result	Decision	
Pre-test Post-test	11.8947 30.1053	57 57	2.70373 3.75920	-30.425	.000**	Significant	Reject Null	
df=56								

Table 5 summarizes the results of the pupils' pre- and post-test performances in the control group. The mean of the pre-test score is 11.8947, with a standard deviation of 2.70373, and the mean of the post-test score is 30.1053, with a standard deviation of 3.75920. The fact that the T-Test for Paired Samples was negative (-30.425) indicates that pupils exposed to the previously available learning model outperformed those who were not. Additionally, the increase was quite substantial, as indicated by the.000\*\* Sig. (2-tailed) value. This implies that the previously available learning model of delivery contributes to the learning of the pupils at San Juan Elementary School, particularly during this time of the pandemic, and thus rejects the null hypothesis.

 Table 6

 T-test of significance on the prepost-test scores along English, Math and Science of the ovperimental group

experimental group							
Groups	Mean	N	SD	T-Test Paired	Sig. (2- tailed)	Result	Decision
				Samples			
Pre-test	11.0000	60	2.89359	-39.798	.000**	Significant	Reject Null
Post-test	35.8333	60	3.12001				
df=59							

Table 6 summarizes the results of the pupils' pre- and post-test performances in the experimental group. The mean of the pre-test score is 11.0000, with a standard deviation of 2.89359, and the mean of the post-test score is 35.8333, with a standard deviation of 3.12001. The fact that the T-Test for Paired Samples was negative (-39.798) indicates that pupils exposed to the Call Up Approach performed better than those who were not. Additionally, the increase was quite substantial, as indicated by the.000\*\* Sig. (2-tailed) value. This implies that the Call Up Approach contributes to the learning of the pupils at San Juan Elementary School, particularly during this time of the pandemic, and thus rejects the null hypothesis.

This significant result is consistent with Johnson and Johnson (2018) findings that smallgroup learning facilitates a more active style of learning. They assert that the more active a lesson is, the more learners gravitate toward intellectual and emotional engagement with the learning process. Additionally, they emphasized that small group learning enables learners to maximize



their individual and collective learning by requiring them to collaborate in order to accomplish shared learning goals.

### Problem 6. Is there a significant difference on the mean gain scores between the control and experimental groups?

The mean gain score of English, Math and Science subjects in the control and experimental group is shown in table 6. Respectively, there were 57 sample scores in the control group and 60 sample scores in the experimental group.

Table 7								
T-test of significance on the mean gain scores between the control and experimental group								
Groups	Mean	Ν	SD	T-Test Independent Samples	Sig. (2- tailed)	Result	Decision	
Control Experimental	18.2105 24.8333	57 60	4.51480 4.83338	-7.649	.000**	Very Significant	Reject Null	
df=115								

The mean gain scores in the control group appeared to be 18.2105 with a standard deviation of 4.51480 while the mean gain score of the experimental group is 24.8333 with a standard deviation of 4.83338. The negative value of T-test Independent Samples (-7.649) explains that the improvement of pupils' score from the pre-test to post-test was significantly higher showing the Sig. (2-tailed) value of .000\*\*, hence reject the null hypothesis. This implies that the mean gain scores in the experimental group are statistically higher than the mean gain score of the control group. This further implies that Call up Approach is more effective in improving the academic performance of the pupils of San Juan Elementary School than of the previously available learning model of delivery.

In the provision that the approach which aims at achieving something is aligned as to what is supposedly to be done, positive outcome is highly be the expected result. As shown in Table 7, the findings of this study corroborate Castro and Tumibay (2019) assertion that instructional designs should be tailored to students' unique needs in order for them to receive a high-quality education.



#### **IV. Conclusion**

Based on the findings of the study, the conclusions and implications can be claimed.

- 1. Since there was no significant difference in the pupils' pre-test performances between the control and experimental group; therefore, the first null hypothesis "*There is no significant difference on the pretest performances along English, Math and Science between control and experimental groups*" is hereby accepted. Inversely, the alternative hypothesis is hereby rejected.
- 2. Since there was a significant difference in the pupils' post-test performances along English, Math and Science between the control and experimental groups; therefore, the second null hypothesis "*There is no significant difference on the posttest performances along Science, English and Math between the control and experimental groups*" is hereby rejected. However, the alternative hypothesis is being accepted.
- 3. Since there was a significant difference on the pre-posttest scores along English, Math and Science subjects of the control and experimental groups; therefore, the third null hypothesis *"There is no significant difference on the pre-posttest scores along Science, English and Math of the control and experimental groups."* is hereby rejected. On the other hand, the alternative hypothesis is hereby accepted.
- 4. Since there was a significant difference on the mean gain score between the control and experimental groups; the fourth null hypothesis "*There is no significant difference on the mean gain scores between the control and experimental groups.*" is hereby rejected. However, the alternative hypothesis is hereby accepted.

Therefore, it is hereby concluded as based on the above findings, that Call Up Approach is more effective in improving the academic performance of learners as compared to the existing modality.



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