Call Up Approach: An Intervention Program Driving Effects on Learners' Performance in the Core Subject Areas

Joji T. Recamara[1]

[1] Jose Rizal Memorial State University, Main Campus, Dapitan City, Province of Zamboanga del Norte, Mindanao, Philippines

Correspondence: Joji T. Recamara, Jose Rizal Memorial State University, Main Campus, Dapitan City, Province of Zamboanga del Norte, Mindanao, Philippines.

Received: August 20, 2022 Accepted: October 20, 2022 Online Published: November 23, 2022

doi:10.5430/wjel.v12n7p236 URL: https://doi.org/10.5430/wjel.v12n7p236

Abstract

This study examined the effectiveness of CALL UP Approach, Teachers' Calibrating action for Lifelong Learning to Upstage Pandemic**,** on pupils' performance specifically in English, Mathematics and Science. CALL UP Approach is an intervention strategy formulated by the teacher and employed during the Modular Distance Learning; a modality implemented during the occurrence of Covid 19 pandemic. 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 feedbacking. 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, intervention, modular distance learning, home visits, Scaffolding, small group community teaching, feedbacking, academic performance

1. Introduction

In the lens of life's realities and wonders, unprecedented occurrences that may effect change positively or negatively to planned educational pursuits seemed inevitable. Living with CoViD-19 however, the seemingly unstoppable threat to life, has never measured our desire to pursue education. 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 separated the learners from the support of the teacher. In distance education particularly in modular distance learning, learners were largely dependent of more knowledge others at home which served as home learning facilitators. COVID-19 pandemic has resulted drastic changes in education. Part of it was the shift from face-to face classes to different learning modalities which included the use of Self Learning Modules. Since education is believed to continue despite the circumstances, teachers started to prepare for modular learning instruction.

Notably however, the gradual re-opening of classes may seem a challenge still as this change of time calls for the paradigm shift of schools to offer different platforms but with the same level of competency and understanding. It can be recalled that 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 directive emphasized no face-to-face classes until safe. It also stated that DE refers to a learning delivery modality where learning takes place between the teacher and the learners who were 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.

Further, it was clearly observed that all throughout the conduct of modular distance learning, the parents who usually served as home learning facilitators have echoed that they have found the new normal of education as stressful and

frustrating as they also were 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 many subjects, they found teaching English, Math and Science difficult.

The difficulty in teaching and learning can possibly be reflected in the academic performance of students. Academic performance is the measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates and results from standardized tests. During this pandemic, the integrity of the academic performance of students under the distance learning modality seemed to be an ordeal to many particularly the parents, teachers and the students themselves. There was never a chance to ensure the integrity of the results thus interventions and strategies fitting to the current situation must be focused on. This is one reason, this study was pursued as all were aware of the many issues in the low performances of students particularly in the areas of English, Mathematics and Science.

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. As such, there was a need to calibrate instructional strategies even during the conduct of distance education and every teacher must ensure that in continuing the educative processes lifelong learning skills of reading and arithmetic which involve critical thinking skills must be continuously developed. These skills notably were the key areas to be mastered by students as these would help unlock the difficult situations in the teaching learning process in other subjects. This was one of the reasons why teachers during this drastic change of teaching delivery have received orders from Department of Education to include home visitation as a strategic approach to address the problems at hand. It can be noted that teachers tried several techniques to at least alleviate the problems of parents and student particularly in their independent learning at home. It is on this premise that the CALL UP Approach has been initiated and practiced by teachers in the current setting as a very meaningful strategy to facilitate the possibility of improving student learning while on limited scheme.

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 Program 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, had 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 felt the 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 this this study was conducted to appropriately asses the intervention program now practiced in the field in a particular school. That is definitely the focus of this study. As a teacher, the mandate to develop strategies that would aid and ascertain learning during this pandemic is and will always be considered. 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 specifically made use of strategies that helped 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.

Learning Activity Sheets (LAS). The learning activity sheets are weekly learning plan to be provided to the pupils

in order to achieve the desired learning competencies. They contain the background information for learners or brief discussion of the lesson, learning competencies, directions/instructions, exercises/activities, guide questions, rubric for scoring, reflection, reference for learners and answer key.

Home visits. Home visiting originally intends to promote positive parenting practices that help parents better prepare their children for school. However, in the context of the present study, this means that a teacher visits the residence in order to provide instructional support to the learners.

Small-group community teaching. This is a strategy to be used in the CALL UP Approach in which 2 to 5 learners are grouped together in order to be provided with instructional assistance in the completion of LAS and SLM. Grouping is based on the proximity of learners' residences.

Scaffolding. This is a personal intervention between the teacher and the learners. This includes helping students when they struggle with new concepts or ideas and gain deep understanding of a topic.

Feedbacking. This involves providing feedback on student performance of activities such as writing assignments, project work, creative activities, and other student activities.

As applied in the first quarter of the school year, this intervention was 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 was assessed in terms of its effectiveness to improve learners' performance in English, Math and Science. Results of this study was 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. Further, the results of this investigation will be used as basis for an extension program of the College of Education which intends to involve students in a particular course for skill enhancements and to build up partnerships with elementary schools needing support on this area.

2. Related Literature

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 small-group 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. Not only does small-group learning enable a deeper level of learning, students involved in small-group education also have a positive perception towards the said teaching approach. According to the study of Genc (2016), activities that are done in small group learning are generally well-received by students perceived as appropriate for a higher level of learning. Small-group discussions is a source of learning opportunities in teaching Mathematics, JS Wester (2021). Small group learning can also be a method used for students who struggle with progressing in certain key academic areas such as reading fluency and reading comprehension. In the study of Begeny et al. (2017), it was found out that students who have inadequate reading fluency skills benefited greatly from receiving small group instruction. A probable reason for this is that learners find it more comfortable to engage themselves in academic activities and improve their skills in an environment that has less population of peers as compared to the traditional classroom. 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.

The study of Kalaian & Kasim, 2014, implies that evidence-based research supports the effectiveness of active small-group learning methods in promoting students' achievement in statistics. Stefanie P. Ferreri and Shanna K. O'Connor (2013) discussed redesigning to a small-group discussion format for a self-care course can be accomplished by increasing student accountability for acquiring factual content outside the classroom. Compared with student experiences in the previous large lecture-based class, students in the smaller-class format reported a preference for working in teams and achieved significantly better academic grades with the new course format. The techniques of small group learning have long been used to complement a lecture-based course, Mills & Alexander

(2013). In some universities, graduate research students now routinely lead such settings. If well-mentored and supported, these students can provide cutting-edge insights into their research and relate closely to undergraduates. The more preparation students do beforehand, whether reading, writing or independent research, the more they will benefit from the session.

It is argued that the bases of effective small group learning are discussion skills such as listening, questioning and responding, S Edmunds et. Al 2010. These skills are the platform for the methods of facilitating discussion and thinking. The facilitating methods strengthen the generic methods, such as tutorials, seminars and electronic tutorials. However, the success of these methods is dependent in part upon the roles and responsibilities taken by students and tutors and the consequent group dynamic. The group dynamic can be adversely affected by individuals. Evaluation of the processes of small group learning can provide diagnoses of the behaviour of difficult individuals. Bishnoi (2017) as well as Kalaian et al. (2018) both found that the ideal group size when utilizing a collaborative approach is 4-5 students and 3-5 students respectively.

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.

This transition, the expected lack of internet access for both teachers and students added to the equation of constraints (Santos 2020; Hernando-Malipot 2020). With these, it should be noted that the Philippines has slow internet speed while remaining one of the most expensive in the world (Hernandez and Rola 2021). Hence, the pandemic has produced a context that may impede active engagement in learning activities. Studies indicate that access to the internet is a driver of quality engagement in remote learning (Tienken 2020). Aside from the important role that educators play in the successful implementation of home-based learning, parents are equally, if not more influential when it comes to their children's academic success. Parental involvement in home-based learning is a very good predictor of a student's academic performance, especially in areas like mathematics and reading. The more the parents get involved in their children's home-based activities, the more likely the students well perform better academically (Huntsinger et al., 2016). Almost all of the parents supported the school closure policy. Parents seemed to have a tendency to first "survive and then thrive" (Clark et al., 2020). That is why parents may have thought about the safety and health of their kids as a priority. This initial and chaotic stage also could affect parents' sentiments on school closure, Garbe A. et al (2020). In support to this, Carter et al. (2020) have also stated in their findings that families that support, monitor, and encourage their children in remote learning had a significant positive relationship to the students' academic performance. Parental involvement in remote learning has been reported to develop the self-regulating skills of students which in turn, develops positive attitudes that are required in remote learning. Despite the rapid and mass introduction of distance or online learning to students all over the globe in efforts to continue education during the pandemic, there was only a small decline in student satisfaction. This is very reassuring because this tells that online learning can be as effective in student satisfaction and performance as any other mode of learning that there is (Castro and Tumibay, 2021). Feelings of parents towards remote learning are mixed. Some parents feel more connected to their child's schoolwork while others see this as an additional burden (Selwyn et al., 2011). The worldwide and rapid shift to remote learning in response to the COVID-19 pandemic calls for examining parents' experiences and needs in the remote learning environment. Over the past decade and apart from this pandemic, online education has been identified as one of the fastest-growing educational trends (Watson et al., 2011) Although remote learning has been generally positively received by educators and learners alike, it does come with its own set of flaws. Dumford and Miller (2018) have found out in their study that students that are enrolled in a greater number of online courses had less exposure to effective teaching practices and suffered from subpar interaction with instructors and other learners. It was reported that these students were less likely to engage with their school faculty and peers and in collaborative learning compared to when they were in a traditional classroom.

Hiranrithikorn (2019) said that although online learning had given advantages such as lower cost compared to the its more traditional counterpart, flexible time for students to learn and accomplish tasks at their own pace and convenience, and mass audiences, there were some very alarming disadvantages to it. Among those disadvantages are being easily distracted since the students have full control of their time in an online setting, little to no active interaction, and a low-success rate because of the absence of school intervention because online learning is a home-based education approach. This is the reason why Castro and Tumibay (2019) have stressed out the importance of creating instructional designs that are tailored to the needs of students to receive quality education in an online mode of learning and that institutions should work closely with their staff and constituents in providing support structures for both the educators and students.

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). According to studies, parental involvement results in higher engagement of children towards their school related endeavors. When parents are involved, it is possible to encourage children not only to engage in self-regulated learning (Farooq and Asim 2020) but to achieve learning success as well (Minke et al. 2014), reinforcing the children's sense of responsibility in accomplishing academic tasks (Jaiswal and Choudhuri 2017).

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). Pomerantz and Grolnick (2017) claimed that the involvement of parents in their children's learning contributes to their children's motivation to do well in school. When parents are concerned about academic outcomes, children are more likely to engage in school-related endeavoursHence, parental monitoring (You and Nguyen 2011) and support (Costa and Faria 2017) are both crucial to this end. At home, for example, parental assistance in0 accomplishing homework appeared to matter in children's engagement in learning activities (Watkins and Howard 2015). Nonetheless, many studies attest that home-based parental involvement is positively linked with children's engagement in learning and academic tasks (Puccioni 2018; Wong et al. 2018).

In support to this, Tohidi et al. (2019) have also determined in their study that there was a significant different in the competency of students who have used SLMs and those who did not. The study stated that the use of SLMs had a positive effect to the academic skills of the students that led to an increase in their competency. The use of SLMs in an anxiety-free learning environment strengthens the students' individual learning. The study also stated that students had a positive acceptance of using SLMs. Modular teaching is one of the most widespread and recognizes teaching learning techniques in many countries including other Western countries and Asian region. Modular approach is used almost in all subjects like natural science, Math and English. Toohey (2015) designed a module to forge educationally sound and logical links between learner's needs, aims, learning outcomes, resources, learning and teaching techniques and strategies, criteria of assessment and evaluation. This provides brief overview of the process, highlighting the crucial variables in module design and finding the relationships between them.

Self-Learning modules consider the individual differences among the learners which necessitate the planning for adoption of the most appropriate activities and exercises in order to help the individual grow and develop at her/his own pace (Kandarp, 2013). Jayasree (2015) mentioned that the use of self-learning modules in teaching is another form of individual used instructions. This is called modular approach of teaching and learning. In older times, if self-learning modules are available on some topics they can be given to the students as assignments for self- learning. On the other hand, nowadays, LSM's and modular approach are used as primary mode of education in the country.

Taneja (2017) defined module as a unit of work in a course of instruction that is virtually self-contained and a method of teaching that is based on the concept of building up skills and knowledge in discrete. 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. Cheung (2017) also had the same result with Phillips (2016) on blended approach. Cheung (2017) found out that not all subjects were fit to be given to the students in the format of learning modules. For some lessons, online sessions and tutorials were far more superior when it comes to understanding and retention of information as compared to just using learning modules. The study also revealed that the reliability, quality and understandability of these learning materials are key concern for students participating in distance learning.

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. Suresh et al. (2018) have also reported the significant positive effects of online learning to students' academic performance. Their results also coincide with the suggestion of Gossenheimer et al. (2017) to make distance education more available to the learners all over the globe as an alternative to traditional learning since it is "faster, cheaper, and potentially better."

That need for a replacement in delivering education has come forth with the COVID-19 pandemic affecting the entire world, greatly limiting day-to-day human activities such as attending school. According to Armstrong-Mensah et al. (2020), despite the shift to distance learning to continue the delivery of during the pandemic, students were surprisingly still motivated to learn and accomplish their tasks and assessments on time. Same with the findings of Gossenheimer et al. (2017), distance learning has also been positively received by the students and they were more motivated to work closely with their peers in order to complete tasks and attain learning objectives. Still, there was a need for a number of improvements in order to make distance learning more effective such as (1) the use of more reliable technologies in its implementation, (2) more flexibility when it comes to assessments and grading, (3) improve access to school services and response times to the students' concerns, (4) more preparation in the implementation of distance learning, and (5) creating more engaging contents to be used in synchronous sessions. 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. Although many studies report that the academic performance of students seem to be generally well-off in distant learning, this does not appear to be the case for students coming from minority groups. In the study of Yeboah and Smith (2016), they have concluded that students participating in distant learning that come from minority groups had greater difficulty in online learning. They have reiterated the importance of establishing multicultural presence on online classes in order to give a better experience and be more effective in teaching minority students. Also, not all countries can have significant benefits from the implementation of distant learning when it comes to students' academic performance. Adnan and Anwar (2020) have reported in their study that the implementation of distant learning in underdeveloped countries such as Pakistan cannot produced desired results in student learning such as academic achievement. A major reason for this is that underdeveloped countries have a lot of barriers when it comes to making distance learning effective such as lack of proper supply of electricity, poor internet connection, and also financial constraints.

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 beyond doubt that university rankings have become a significant part of the tertiary education landscape around the globe (Marmolejo, 2015). 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. Greenberg (2011) has the view that performance is a set of financial and nonfinancial indicators, which offer data on the level of accomplishment of objectives and results. Hazelkorn (2015) stated most of higher education institutions used peer review and accreditation as their performance assessment. However, the outcomes of these instruments were really difficult to understand by layperson and this leads to break down in trust among stakeholders (Hilman & Abubakar, 2017). Hilman and Abubakar (2017) stated that nonstudent's-related academic achievement consists of having competitive positions, innovation, organizational agility, sustainability, and market share. Therefore, these measurements are foundation for further improvement, which this study adapted, analyzed, synthesized, and made some improvement with empirical validation.

Conceptual Framework of the Study

The Calibrating Action for Lifelong Learning to Upstage Pandemic, CALL UP Approach is a teacher-researcher-designed intervention primarily to close the gap between the teacher and the learners in time of the COVID-19 pandemic. In the military practice, call up means to call the attention of the cadets for proper order. In this study, similarly and literally it means calling the attention of learners through working on learning activities to aid and improve their learning performances particularly in English, Math and Science, and to alleviate the learning difficulties brought in by the pandemic. This design is experimental in nature and subject to improvements and adjustments in each week of the roll out. This intervention made sure that strategies to avoid the spread of the virus were all in. DepEd and IATF have allowed home visits subject to stringent health protocols. These shall be observed at all times. The CALL UP Approach is composed of home visits, small group community teaching, scaffolding and feedbacking.

Learning Activity Sheets (LAS). The learning activity sheets are weekly learning plan to be provided to the pupils in order to achieve the desired learning competencies. They contain the background information for learners or brief discussion of the lesson, learning competencies, directions/instructions, exercises/activities, guide questions, rubric for scoring, reflection, reference for learners and answer key.

Home visits. Home visiting originally intends to promote positive parenting practices that help parents better prepare their children for school. However, in the context of the present study, this means that a teacher visits the residence in order to provide instructional support to the learners.

Small-group community teaching. This is a strategy to be used in the CALL UP Approach in which 2 to 5 learners are grouped together in order to be provided with instructional assistance in the completion of LAS and SLM. Grouping is based on the proximity of learners' residences.

Scaffolding. This is a personal intervention between the teacher and the learners. This includes helping students when they struggle with new concepts or ideas and gain deep understanding of a topic.

Feedbacking. This involves providing feedback on student performance of activities such as writing assignments, project work, creative activities, and other student activities.

Research Questions

With the foregoing discussions, the study purposely answered the questions;

1.) What is the pretest performance of the control group; and the experimental group in English, Science and Mathematics?

2.) Is there a significant difference in the pretest performances of pupils in the control and experimental groups along: English; Mathematics; Science

3.) What is the posttest performance of the control group; and the experimental group in English, Mathematics and Science?

4.) Is there a significant difference in the posttest performances of pupils in the control and experimental groups along: English; Mathematics; Science?

5.) Is there a significant difference in the pretest and the posttest scores of the control and experimental groups in English, Mathematics and Science?

6.) Is there a significant difference in the mean gain scores between the control group and the experimental group in English, Mathematics and Science?

3. Methods and Procedures

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.

Respondents and Sampling

The respondents of the study were the 39 Grade 5 pupils. The Grade 5 pupils were chosen randomly using the lottery method to determine who constituted the control and experimental groups.

Group	Number of Respondents
Control Group	19
Experimental Group	20
Total	**39**

Research Instrument and Validity

The study utilized the paper and pen test for both pretest and posttest to measure the academic performance for English, Math and Science. The topics covered were competencies found in the fourth quarter. The instrument was referred to a panel of experts composed of a Supervisor, Principal and Master Teacher to make sure that the questions are constructed properly.

Data Gathering

Prior to the conduct of the experiment, a pretest was given to two groups of respondents. After which, the 2 groups received the self-learning modules and learning activity sheets. The previously available or the absence of the learner support like home learning facilitators for the two groups were not altered just to accommodate the study. However, the learners belonging to the experimental group received learning support strategies embodied in the CALL UP Approach like home visits and small group teaching. Learners were met individually, by pair or by small group depending on the location of their residences for tutorials or teaching. This was done following the strict health and safety measures such as observing physical distancing, wearing of face mask and face shield and hand sanitizing. Prior to meet ups, health check-ups for both the teacher and the learners were done to ensure that the parties are healthy. The conduct of this activity was presented to the Division Office, School Principal and Municipal IATF. Their approval and guidance were sought. The experiment lasted for four weeks and each child received a 3 – hour weekly instruction or 1 hour a week for each subject. Lessons discussed were based on the most essential learning competencies for the fourth quarter. The competencies for English 5 were as follows: (1) Analyze how visual and multimedia elements contribute to the meaning of the text, and (2) write paragraphs showing cause and effect, comparison and contrast and problem-solution relationships. For Mathematics 5, (1) organizes data in tabular from and presents them in a line graph, (2) interprets data presented in different kinds of line graphs (single to double-line graph), (3) solves routine and non-routine problems using data presented in a line graph, and (4) draws inferences based on data presented in a line graph. Meanwhile, the Science 5 competencies are as follows:(1) describes how rocks turn into soil, (2) investigates soil erosion in the community and its effects in the living things and environment, (3) characterizes weather disturbances in the Philippines and describes their effects in daily lives, and (4) infers in the changes of patterns of the moon.

After all the topics were exhausted a supervised posttest was done.

4. Results and Discussions

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

Control group	N	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	N	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 summarizes the descriptive statistics for the control and experimental groups' pre-test performance. 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.

Table 2. Test of significance on the pre-test scores along English, Math and Science of the control and experimental group

Subject	Groups	N	Mean	SD	T-Test	P-value	Result	Decision
English								
	Control	19	12.7368	2.621	0.489	0.628	Not Significant	Fail to Reject the Null
	Experimental	20	12.300	2.939				
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	2.209	0.033	Significant	Reject Null
	Experimental	20	10.050	2.999				

Table 2 summarizes the pre-test performance of English, Math, and Science subjects in the control and experimental groups. The results projected on the table indicates that the pre-test performance of the control and experimental groups are statistically equivalent. 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, 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. 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.

Table 3. Post-test performances in Science, English and Math of the control and experimental group

Control group	**N**	**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
Experimental Group	**N**	**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

Table 3 demonstrates the small difference in post-test performance between the control and experimental groups in terms of their performances in the areas tested. 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.

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

Subject	Groups	N	Mean	SD	T-Test	P-value	Result	Decision
English								
	Control	19	27.053	3.341	-6.121	0.000	Very Significant	Reject Null
	Experimental	20	33.700	3.435				
Math								
	Control	19	31.000	3.480	-6.277	0.000	Very Significant	Reject Null
	Experimental	20	37.050	2.481				
Science								
	Control	19	32.263	2.257	-6.223	0.000	Very Significant	Reject Null
	Experimental	20	36.750	2.245				

Table 4 summarizes the post-test performances of English, Math, and Science subjects in the control and experimental groups. The results as shown in the table implied 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.

Table 5. T-test of significance on the prepost-test scores along English, Math and Science of the control group

Groups	Mean	N	SD	T-Test Paired Samples	Sig. (2-tailed)	Result	Decision
Pre-test	11.8947	57	2.70373	-30.425	.000**	Significant	Reject Null
Post-test	30.1053	57	3.75920				

df=56

Table 5 summarizes the results of the pupils' pre- and post-test performances in the control group. The figures on the table suggested that 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 pre-post-test scores along English, Math and Science of the experiential group

Groups	Mean	N	SD	T-Test Paired Samples	Sig. (2-tailed)	Result	Decision
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 notable increase shown in the table 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 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 small-group 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.

Table 7. T-test of significance on the mean gain scores between the control and experimental group

Groups	Mean	N	SD	T-Test Independent Samples	Sig. (2-tailed)	Result	Decision
Control	18.2105	57	4.51480	-7.649	.000**	Very	Reject
Experimental	24.8333	60	4.83338			Significant	Null

df=115

The results as illustrated in the table 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.

5. Conclusions and Recommendations

The main purpose of this study was to investigate the effectiveness of CALL UP Approach on the performances of elementary graders in the core areas of the curriculum particularly, English, Science and Math. It specifically studied on the pre-tests and post-tests performances of the pupils in the control and experimental group of English, Math and Science subjects. The study also found out the significant difference in the pre-tests and post-test performances of the pupils in English, Math and Science subjects between the control and experimental group. This study also considered the significant difference on the mean gain scores between the control and experimental groups.

Notably, with the results and discussions it was confirmed and concluded that based therefore on the findings, CALL UP Approach is more effective in improving the core subject performances of learners as compared to the existing modality. Call Up Approach is strongly recommended to other schools who particularly those who have met similar difficult situations in the implementation of Modular independent learning modality. More importantly, this research findings can be a bedrock foundation to develop an extension program of the College of Education for which professors of English, Science and Mathematics can extend free community service to partner institutions who have children struggling from modular distance learning using the CALL UP Approach model.

References

Abante, A., Cruz, R., Guevarra, D., Lanada, M. I. B., Macale, M. J. S., Roque, M. W. B., ... Cabrera, W. C. (2021). A comparative analysis on the challenges of online learning modality and modular learning modality: A basis for training program. *International Journal of Multidisciplinary Research and Analysis*, *4*(04), 463-476. https://doi.org/10.47191/ijmra/v4-i4-17

Abubakar, A., Hilman, H., & Kaliappen, N. (2018). New tools for measuring global academic performance. *Sage Open*, *8*(3), 2158244018790787. https://doi.org/10.1177/2158244018790787

Adnan, M., & Anwar, K. (2020). *Online Learning amid the COVID-19 Pandemic: Students' Perspectives.* https://doi.org/10.33902/JPSP.2020261309

Alam, M. B. (2021). SELF-LEARNING MODULES (SLMs') IN TLE: AN ANALYSIS OF THE VIEWS AND PERCEPTIONS OF TLE TEACHERS. *EPRA International Journal of Multidisciplinary Research (IJMR)*, *7*(10), 1-1.

Amponsah, M. O., Milledzi, E. Y., Ampofo, E. T., & Gyambrah, M. (2018). *Relationship between Parental Involvement and Academic Performance of Senior High School Students: The Case of Ashanti Mampong Municipality of Ghana.* https://doi.org/10.12691/education-6-1-1

Andamon, J., & Tan, D. A. (2018). Conceptual understanding, attitude and performance in mathematics of grade 7 students. *International Journal of Scientific & Technology Research*, *7*(8), 96-105.

Armstrong-Mensah, E., Ramsey-White, K., Yankey, B., & Self-Brown, S. (2020). *COVID-19 and Distance Learning: Effects on Georgia State University School of Public Health Students.* https://doi.org/10.3389/fpubh.2020.576227

Beck, D. E., Maranto, R., & Lo, W. J. (2014). Determinants of student and parent satisfaction at a cyber charter school. *The Journal of Educational Research*, *107*(3), 209-216. https://doi.org/10.1080/00220671.2013.807494

Begeny, J. C., Levy, R. A., & Field, S. A. (2016). Reading Fluency: An Evaluation of the Existing Research. Retrieved on May 10, 2021, from https://www.tandfonline.com

Bir, D. D. (2019). *Comparison of Academic Performance of Students in Online vs Traditional Engineering Course.* https://doi.org/10.2478/eurodl-2019-0001

Bishnoi, N. (2017). Collaborative learning: A learning tool advantages and disadvantages. *Indian Journal of Health and Wellbeing*, *8*(8), 850-852.

Carter, R. A., Rice, M., Yang, S., & Jackson, H. A. (2020). *Self-regulated learning in online learning environments: strategies for remote learning*. https://doi.org/10.1108/ILS-04-2020-0114

Castro, M. D. B., & Tumibay, G. M. (2021). *A literature review: efficacy of online learning courses for higher education institution using meta-analysis.* Retrieved on May 10, 2021, from https://www.researchgate.net/publication

Cheung, S. K. S. (2017). *Distance-Learning Students' Perception on the Usefulness of Open Educational Resources.* https://doi.org/10.1007/978-3-319-59360-9_34

Clark, A., Jit, M., Warren-Gash, C., Guthrie, B., Wang, H. H., Mercer, S. W., ... Jarvis, C. I. (2020). Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study. *The Lancet Global Health*, *8*(8), e1003-e1017. https://doi.org/10.1016/S2214-109X(20)30264-3

Collado, Z. C., Rodriguez, V. R., & Dueñas III, Z. D. (2021). Children's engagement in self-learning modules (SLMs) amid the pandemic: a predictive analysis on the role of internet access, household food security, and parental involvement to modular classes. *Education 3-13*, 1-14. https://doi.org/10.1080/03004279.2021.1954969

Domina, T., Renzulli, L., Murray, B., Garza, A. N., & Perez, L. (2021). Remote or removed: Predicting successful engagement with online learning during COVID-19. *Socius*, *7*, 2378023120988200. https://doi.org/10.1177/2378023120988200

Dumford, A. D., & Miller, A. L. (2018). *Online learning in higher education: exploring advantages and disadvantages for engagement*. https://doi.org/10.1007/s12528-018-9179-z

Edmunds, S., & Brown, G. (2010). Effective small group learning: AMEE Guide No. 48. *Medical teacher*, *32*(9), 715-726. https://doi.org/10.3109/0142159X.2010.505454

El Refae, G. A., Kaba, A., & Eletter, S. (2021). The Impact of Demographic Characteristics on Academic Performance: Face-to-Face Learning Versus Distance Learning Implemented to Prevent the Spread of COVID-19. Retrieved on May 11, 2021, from http://www.irrodl.org

Farooq, M., & Asim, I. (2020). Parental involvement as predictor for self-regulated learning and academic achievement of students at secondary school level. *Journal of Educational Sciences & Research*, *7*(1), 14-32.

Ferreri, S. P., & O'Connor, S. K. (2013). Redesign of a large lecture course into a small-group learning course. *American journal of pharmaceutical education*, *77*(1). https://doi.org/10.5688/ajpe77113

Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research*, *4*(3), 45-65. https://doi.org/10.29333/ajqr/8471

Genc, M. (2016). An evaluation of the cooperative learning process by sixth-grade students. Retrieved on May 10, 2021 from https://journals.sagepub.com

Gossenheimer, N., Bem, T., Carneiro, M. L. F., & De Castro, M. S. (2017). *Impact of distance education on academic performance in a pharmaceutical care course.* https://doi.org/10.1371/journal.pone.0175117

Gueta, M. F., & Janer, S. S. (2021). Distance Learning Challenges on the Use of Self-Learning Module. *United International Journal for Research & Technology*, *2*(07).

Hazelkorn, E. (2015). *Rankings and the reshaping of higher education: The battle for world-class excellence*. Springer. https://doi.org/10.1057/9781137446671

Hernandez, J. E. I. A., & Rola, A. C. C. (2021). Factors affecting the entry of foreign operated companies in the Philippine telecommunications industry. *Journal for information, study and discussion of Global Resource Management, Doshisha University*, *7*, 2-19.

Hernando-Malipot, M. (2017). *Wanted: More qualified SHS teachers.*

Hiranrithikorn, P. (2019). Advantages and Disadvantages of Online Learning. Retrieved on May 10, 2021, from http://icbtsproceeding.ssru.ac.th

Huntsinger, C. S., Jose, P. E., & Luo, Z. (2016). Parental Facilitation of early mathematics and reading skills and knowledge through encouragement of home-based activities. https://doi.org/10.1016/j.ecresq.2016.02.005

Hwang, G. J., Wang, S. Y., & Lai, C. L. (2021). *Effects of social regulation-based online learning framework on students' learning achievements and behaviors in mathematics.* https://doi.org/10.1016/j.compedu.2020.104031

Jayasree P. (2014). Distance Education and Improvement of Curriculum, P.G (Pedagogics, Vol.Attended Workshop on "Innovative Strategies for the Effective Transaction of instructions, pp 55-59).

Johnson, D. W., & Johnson, R. T. (2018). *Cooperative Learning: The Foundation for Active Learning.* https://doi.org/10.5772/intechopen.81086

Kalaian, S. A., & Kasim, R. M. (2014). A meta-analytic review of studies of the effectiveness of small-group learning methods on statistics achievement. *Journal of Statistics Education, 22*(1). https://doi.org/10.1080/10691898.2014.11889691

Kalaian, S. A., Kasim, R. M., & Nims, J. K. (2018). Effectiveness of Small-Group Learning Pedagogies in Engineering and Technology Education: A Meta-Analysis. *Journal of Technology Education, 29*(2), 20-35. https://doi.org/10.21061/jte.v29i2.a.2

Kandarp, D., & Principal, S. (2013). Modular Method of teaching. *Int. J. Res. Educ., 2*(2), 169-171.

Khalil, M. K., Nelson, L. D., & Kibble, J. D. (2010). The use of self-learning modules to facilitate learning of basic science concepts in an integrated medical curriculum. *Anatomical sciences education*, *3*(5), 219-226. https://doi.org/10.1002/ase.177

Maddrell, J. A., Morrison, G. R., & Watson, G. S. (2017). Presence and learning in a community of inquiry. *Distance Education*, *38*(2), 245-258. https://doi.org/10.1080/01587919.2017.1322062

Madjar, N., Greenberg, E., & Chen, Z. (2011). Factors for radical creativity, incremental creativity, and routine, noncreative performance. *Journal of applied psychology*, *96*(4), 730. https://doi.org/10.1037/a0022416

Magsambol, B. (2020). *CHED says schools are ready for "flexible learning" in August.* Rappler.

Male, T., & Burden, K. (2014). Access denied? Twenty-first-century technology in schools. *Technology, Pedagogy and Education, 23*(4), 423-437. https://doi.org/10.1080/1475939X.2013.864697

Mills, D., & Alexander, P. (2013). Small group teaching: a toolkit for learning. *Higher Education, 36*.

Minke, K. M., Sheridan, S. M., Kim, E. M., Ryoo, J. H., & Koziol, N. A. (2014). Congruence in parent-teacher relationships: The role of shared perceptions. *The elementary school journal*, *114*(4), 527-546. https://doi.org/10.1086/675637

Morales, S. R., & Morales, Y. R. S. (2020). *Understanding the Typologies of the Different Learning Institutions in the Philippines: Surviving the Crisis of COVID-19 and Beyond.* https://doi.org/10.2139/ssrn.3724396

Morgan, H. (2020). Best practices for implementing remote learning during a pandemic. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *93*(3), 135-141. https://doi.org/10.1080/00098655.2020.1751480

National Association of EMSE Teachers. (2020). *Foundations of Education: An EMS Approach, Third Edition*. Jones and Barlett Learning.

Phillips, J. A. (2016). Replacing traditional live lectures with online learning modules: Effect on learning and student perceptions. Retrieved on May 11, 2021, from https://www.sciencedirect.com

Phirangee, K., Epp, C. D., & Hewitt, J. (2016). *Exploring the Relationships between Facilitation Methods, Students' Sense of Community, and Their Online Behaviors.* https://doi.org/10.24059/olj.v20i2.775

Pomerantz, E. M., & Grolnick, W. S. (2017). *The role of parenting in children's motivation and competence: What underlies facilitative parenting?*

Prior, D. D., Manzanov, J., Meacheam, D., Heaslip, G., & Hanson, J. (2016). *Attitude, digital literacy and self efficacy: Flow-on effects for online learning behavior.* https://doi.org/10.1016/j.iheduc.2016.01.001

Rahmawati, R., Lestari, F., & Umam, R. (2019). *Analysis of the Effectiveness of Learning in the Use of Learning Modules Against Student Learning Outcomes.* https://doi.org/10.24042/djm.v2i3.4557

Selwyn, N. (2011). 'Finding an appropriate fit for me': Examining the (in) flexibilities of international distance learning. *International Journal of Lifelong Education*, *30*(3), 367-383. https://doi.org/10.1080/02601370.2011.570873

Silva, V., Costa, P., Pereira, I., Faria, R., Salgueira, A. P., Costa, M. J., ... Morgado, P. (2017). Depression in medical students: insights from a longitudinal study. *BMC medical education*, *17*(1), 1-9. https://doi.org/10.1186/s12909-017-1006-0

Simonson, M., Zvacek, S., & Smaldino, S. (2019). *Teaching and Learning at a Distance: Foundations of Distance Education, Seventh Edition*. Information Age Publishing, Inc.

Skinner, K. L., Hyde, S. J., McPherson, K. B. A., & Simpson, M. D. (2016). *Improving Interpersonal Skills through Experiential Small Group Learning.* https://doi.org/10.5204/jld.v9i1.232

Taneja, R. (2017). *Dictionary of Education.* Anmol Publication Murare New Dehli, India p. 155.

Tienken, C. H. (2020). The not so subtle inequity of remote learning. *Kappa Delta Pi Record*, *56*(4), 151-153. https://doi.org/10.1080/00228958.2020.1813502

Tohidi, S., Moonaghi, H. K., Shayan, A., & Ahmadinia, H. (2019). The effect of self-learning module on nursing students' clinical competency: A pilot study. Retrieved on May 11, 2021, from https://www.ijnmrjournal.net

Toohey, S. (2015). *Designing Courses for Higher Education*. Buckingham: SRHE and OU Press.

Villaver, L. G. M. (2014). *Experiential Learning, Approach: Effects on Mathematics Performance and Attitude.* Unpublished Thesis. Central Mindanao University.

Wai-Cook, M. S. S. (2020). The Reality of Home-Based Learning during COVID-19: Roles of Parents, Teachers, and School Administration in Promoting Self-Directed Learning. *Journal of School Administration Research and Development, 5*, 86-92. https://doi.org/10.32674/jsard.v5iS2.2841

Watkins, C. S., & Howard, M. O. (2015). Educational success among elementary school children from low socioeconomic status families: A systematic review of research assessing parenting factors. *Journal of Children and Poverty*, *21*(1), 17-46. https://doi.org/10.1080/10796126.2015.1031728

Wester, J. S. (2021). Students' Possibilities to Learn From Group Discussions Integrated in Whole-class Teaching in Mathematics. *Scandinavian Journal of Educational Research*, *65*(6), 1020-1036. https://doi.org/10.1080/00313831.2020.1788148

Yeboah, A. K., & Smith, P. (2016). Relationships between Minority Students Online Learning Experiences and Academic Performance. Retrieved on May 11, 2021, from https://eric.ed.g

You, S., & Nguyen, J. T. (2011). Parents' involvement in adolescents' schooling: A multidimensional conceptualization and mediational model. *Educational Psychology*, *31*(5), 547-558. https://doi.org/10.1080/01443410.2011.577734