

Relative Effectiveness of Blended Approach

RUSSEL V. SANTOS

Urdaneta City University Urdaneta City, Pangasinan russelsantos @ucu.edu.ph

JAMES P. SAGUIPED

San Angel Elementary School Rosales, Pangasinan james.saguiped@deped.gov.ph

Abstract — This research investigated the relative effectiveness of blended learning approach in relation to the academic performance, social and emotional of Rosales District II learners. The respondents of this study were the teachers of Grades 4, 5 and 6 in the schools of Rosales District II. The schools were categorized as small, medium, large and mega. Majority of the respondents belong to medium schools. Using the ANOVA, the researcher determines the effectiveness of blended learning. There were 17 schools in Rosales District II, all the grades 4-6 were the respondents of this study. One hundred percent of the schools in the Rosales District II used modular print during the school year 2020-2021, however, during the school year 2021-2022, the district used blended learning as modality. Majority used modular print while some used online. There is significant difference between the academic performance of Rosales District II learners in School Year 2020-2021 and 2021-2022. The Average MPS during modular print increases as blended learning used as modality in learning. Majority of the respondents encountered learners' difficulty in independent learning. However, there were no respondents having existing health conditions. It can also be concluded that blended learning approach is an effective approach in the relation to academic performance, social and emotional of Rosales District II learners. Hence the researcher recommends the teachers should be provided with more trainings in using blended approach such as attending online trainings and other in-service trainings, teachers should enhance their professional growth by pursuing their Master Degree or Doctoral Degree in reputable institutions, and further studies on the different teaching style in elementary grade should undertake to further strengthen the program and in wider parameter using other variables.

Keywords — Blended Leaning Approach, Relative Effectiveness

I. Introduction

Education is one of the most powerful tools in lifting excluded children and adults out of poverty and is a stepping stone to other fundamental human rights. It is the most sustainable investment. The right to quality education is already firmly rooted in the Universal Declaration of Human Rights and international legal instruments, the majority of which are the result of the work of UNESCO and the United Nations.



Furthermore, education is an empowering right in itself and one of the most powerful tools by which economically and socially marginalized children and adults can lift themselves out of poverty and participate fully in society. To unleash the full transformational power of education and meet international markers of progress such as those of the Sustainable Development Agenda, everyone must have access to it. Binding countries to certain standards by way of law is one way of ensuring access to quality education is widened. Legal guarantees and protection of the right to education are not time-bound (unlike policies and plans). They also ensure that judicial mechanisms (such as courts and tribunals) can determine whether human rights obligations are respected, impose sanctions for violations and transgressions, and ensure that appropriate action is taken, UNESCO, (2022).

Elementary education is very vital in human life as well as for the whole society. So it is the obligation of every guardian and Government to give elementary education to every child. It serves three major purposes in a man's life. It gives him a basic groundwork for learning the core subjects. It helps to learn about his environment and society and it also helps him to foster his interest in duty and responsibility within his own community through countless activities.

However, COVID-19 pandemic has affected all levels of the education system. Educational institutions around the world have either temporarily closed or implemented localized closures affecting about billions of pupils worldwide. Many universities around the world either postponed or canceled all campus activities to minimize gatherings and hence decrease the transmission of virus.

Furthermore, due to the suspension of classroom teaching in many schools, a switch to the online teaching becomes effective. This form of learning provides an alternative way to minimize either the contact between pupils themselves or between the pupils and lectures. However, many pupils have no access to the online teaching due to lack of either the means or the instruments due to economical and digital divide, Mahdy (2020).

In addition, innovative thinking should be employed to universalize of elementary education in the country. Blended learning is one such innovative thinking which may proof effective in giving elementary education more successfully to the children, Kundu (2018).

Blended learning is an approach of teaching and learning in which pupils learn through electronic and online media as well as traditional face-to-face teaching. Instead of learning only from their teacher, and only interacting with their peers, pupils also expose with technology in order to meet learning goals.

According to Wikipedia, blended learning also known as hybrid learning; it is an approach to education that combines online educational resources and opportunities for communication online with traditional place-based classroom methods, Quigley (2019).



In addition to the production of knowledge, pupils engaging in blended learning also obtain and apply knowledge with a combination of online and in-person modalities. Blended learning in the classroom typically requires that students have 1:1 access to an electronic device.

Furthermore, blended education employs all the features of technology in the design, application and use of school curricula, and achieves the flexibility required to meet the needs of teachers of different educational levels, ages and schedules. It provides civilizational communication between many cultures and produces a strong link between them to exchange benefits in all scientific and practical fields. It also achieves integration in the formative and final assessment systems for learners and teachers, enriches student involvements, enhances educational opportunities for them, and provides a transition from group education to student-centered education, which necessarily leads to increased collaboration.

Blended learning is one of the most current methods of learning helping in solving the knowledge explosion problem, the rising demand for education and the problem of congested lectures if used in distance learning, expanding the acceptance opportunities in education, being able to train, educate and assimilate workers without leaving their jobs and teaching housewives, which contributes to raising the literacy rate and eliminating illiteracy; blended learning increases the learning effectiveness to a large degree, decreases the time environment required for training, decreases the training costs, allows the learner to study at his favorite time and place, allows for live interviews and discussions on the network, provides updated information suiting learners' need, and provides simulations, animations, practical events and exercises and practical applications Al- Shunnaq and Bani Domi (2010).

Furthermore, Masri (2021) stated in his study entitled The effectiveness of using blended learning for teaching English language vocabulary for 1st grade students at Al Tafila Directorate of Education stated that Blended learning contributes to significantly reducing learning costs compared to applying e-learning alone.

Moreover, in addition to providing direct contact between the trained teacher, it increases human interdependence and strengthens social relations between students among them and between teachers and their students alike, as it contributes to the enhancement of raising the excellence of educational curricula and increases their efficiency and the efficiency of the teachers who are based on them.

In contrary, As stated by Salameh, 2005 in the study of Khader (2016) entitled The Effectiveness of Blended Learning in Improving Students' Achievement in Third Grade's Science in Bani Kenana shows several challenges of blended learning, some of which is that some students lack the sufficient experience or skills for dealing with the computer and the Internet networks, which represents the most significant obstacle to the blended learning especially if we are talking about a kind of self-learning; another problem is the absence of any guarantee for any of the devices for pupils in their homes or places where they teach the course electronically at the same



efficiency, capacity, speed, and equipment, and it is suitable for the systematic content in addition to the presence of many problems in the networking and communications systems and speed; one of the most important problems of blended learning is the non-availability of qualified personnel in this type of learning.

The *flex* and the *self-blend* approaches offer teachers and pupils more choice and flexibility. In flex, the online platform gives most of the curriculum and learning activities, while the teacher is open to support pupils individually or in small groups. Usually the online platform adapts and differentiates content based on pupils' needs. In self-blend, pupils choose online improvement content to supplement their learning in school, in order to expand their skills or to try on advanced coursework, Gradecam (2020).

However, it is difficult to instruct some materials electronically, the blended education system was a suitable solution to all these difficulties, with its flexibility in implementing educational programs and approaches of teaching them and increasing the opportunity for their overview and internationalization.

Literature Review

The study of R. Obiedat, L. Nasir Eddeen, O. Harfoushi, A. Koury, M. AL-Hamarsheh, and N. AlAssaf (2014) entitled Effect of Blended-Learning on Academic Achievement of Students in the University of Jordan concluded that blended-learning has a significant effect on both teachers and pupils. Blended- learning includes a mix of self-learning computer-based courses with classroom organisms. The study employed a sample of ninety-two teachers and pupils who voluntarily took part in this study. The outcome of the study presented that blended learning was positive and important for both pupils and teachers. Majority of pupils perceived that the meeting helped them to improve their skills in the English language and make improvement in self-evaluation. Study also shows that teacher's role and their experience in the meeting will make them more effective.

In addition, one of the main findings of the study is that blended learning has positive effect on pupils' study process. Another finding of this study is that teachers found it enjoyable and interesting for them and would be pleased to repeat this method of learning in the forthcoming.

According to *Setyaningrum*, (2019), in mathematics area, technology can be used as a method to create a hands-on and meaningful mathematics lesson, Herron, (2010) and to visualized mathematical ideas or objects particularly geometrical items. Pupils' who spent a lot of time using technology were shown implemented better on mathematical skills Bulut & Delen, (2011).

Furthermore, pupils who were taught in blended learning significantly outperformed their complements who were taught in conventional teaching method. Many studies have indicated the blended learning is more effective in terms of academic achievement than traditional method Hung, (2007); Liu, (2011); Wang & Yu, (2012); Wiginton, (2013). In his study entitled



"Blended learning: Does it help students in understanding mathematical concepts?", blended learning is better than conventional teaching methods in terms of improving pupils' conceptual understanding in mathematics lesson. The reason of this may be related to the flexibility provided in blended learning. If each pupil has their own access to learning material, they can control their learning pace and read again any material they encounter any problems. This was not happened in conventional method, if pupils missed some information, it is difficult for them to catch up on what they have overlooked.

Finally, we propose blended learning related suggestions regarding how to trigger students' connection need and inspire their wisdom and potential.

In contrary, in terms of the problems on the use of blended learning, according to (Albiladi & Alshareef, 2019; Bataineh & Mayyas, 2017; Crawford & Jenkins, 2017; Medina, 2018; Shand & Farrelly, 2018) as stated by Alvarez (2020) in his study entitled Learning from the problems and challenges in blended learning: Basis for faculty development and program enhancement, studies have shown that not all faculty members are inclined towards blended-based instruction (Benson et al., 2011). Some still measured the use of ICT as "time-consuming" (Benson et al., 2011, p.148). For instance, it was revealed that preparations for lecture or teaching resources design and development on web-based platform involve more time than face-to-face interaction. Some believe that the use of hybrid approach is more difficult when it comes to teaching and learning preparations.

This clarifies the idea presented by Ma'arop and Embi (2016) where they described blended learning as a burden, both physically and cognitively. Meaning, teachers see the need to spend more time like designing the course platform, uploading of instructional materials, answering queries and evaluating students' online outputs. Thus, it increases their workload, such as the time required (Alebaikan & Troudi, 2010), Alvarez (2020).

Batas Pambansa Blg. 232 stated in Chapter 2, Section 3 that the State shall promote the right of every individual to relevant quality education, regardless of sex, age, creed, socioeconomic status, physical and mental conditions, racial or ethnic origin, political or other affiliation. The State shall therefore promote and maintain equality of access to education as well as the enjoyment of the benefits of education by all its citizens. DepEd Order No. 18, s 2020 entitled Policy Guidelines for the Provision of Learning Resources in the Implementation of Basic Education Learning Continuity Plan. The public health emergency brought about by COVID-19 calls for the Department of Education (DepEd) to be innovative and resourceful in delivering quality, accessible, relevant, and liberating education. In response to this emergency, DepEd developed the Basic Education Learning Continuity Plan (BE-LCP) to ensure that learning opportunities are provided to our learners in a safe manner, through different learning delivery. In line with this, the Department, through its Regional and Schools Division Offices undertake the urgent and necessary development, production and provision of learning resources, in accordance with its mandate.



Regional Memorandum 35, s. 2017 (Regional Brigada Eskwela Implementation and Guidelines Contest). The schools' category was based on 2017 Brigada Eskwela Implementing Schools Category. Small schools are those who have nine and below number of teachers, medium schools are those who have ten to twenty-nine teachers, large schools are those who have thirty to fifty teachers, while mega school are those who have fifty-one and above number of teachers.

The COVID-19 pandemic has driven educational leaders to reorganize the curriculum and modify the instructional set-up to accommodate remote learning of which using technology is the most possible solution to the existing problem. (Sacramento et.al (2021) Due to this pandemic, <u>concerns on education in the Philippines</u> have deteriorated. To address them, the Department of Education (DepEd) has used distance learning modes, while also applying blended learning programs. These contain online classes, printouts, and lessons via TV and social media platforms. Although many pupils and teachers prefer face-to-face classes, they have to adapt to online education as alternative learning. Online classes will continue as schools remain close. However, some of these new learning tools need internet access.

Llego (2020) defines blended learning as a learning delivery that combines face-to-face with any or a combination of online distance learning, modular distance learning, and TV/Radiobased Instruction. Blended learning will allow the schools to limit face-to-face learning, ensure social distancing, and lessen the capacity of people outside the home at any given time.

Tong et.al (2022) confirmed that blended learning positively impacts students' academic achievement. In addition, observations and student opinion survey results also indicated that blended learning increased student interactions with teachers and improved students' academic achievement, self-study abilities and learning attitudes.

However, critical for employment will be the production of the needed teacher's and learner's learning materials as well as the support of media institutions like TV and radio stations.

Miscellaneous (2021) enumerates the four model of blended learning, the flipped classroom model, the enriched virtual model, the flex model and the A La Carte model. Flipped classrooms give teachers the chance to facilitate the achievement of educational projects and to support pupils as they exercise using concepts learned independently. In a blended learning setting, teacher-led exercises can take place in person while individual study occurs at home using online modules or video lectures.

In addition, the enriched virtual model is parallel to the flipped classroom. Pupils learn <u>primarily online</u>, though face-to-face meetings with the teacher are also required. Whereas the flipped classroom can be thought of as reversing the original order of instruction related to traditional learning environments, the improved virtual model starts with traditional teaching as its origin.



Furthermore, the individual rotation model can be employed in a variation of different educational settings, including in blended learning models. An educational resource from the Wisconsin Department of Public Instruction describes how students in this arrangement will be arranged by their teacher or specific software into <u>unique educational pathways</u> based on their needs.

In addition, learning opportunities comprise self-study, small groups, teamwork, lessons conducted by the teacher for the whole group, and individualized interventions. Fixed programs may be used in place of modified learning journeys if needed, and numerous stations can be finished online or in person. For a fully in-person experience, pupils can participate in independent learning on a lab rotation schedule.

The Flex Model is a self-paced, pupil-driven model. According to the book learning in the digital age, flex models were originally developed to <u>support returning students</u> who had not completed their high school education. While educators make learning opportunities for their pupils and support their development as needed, individual learners continue through modules on their own. This level of independence may be better suited to older pupils.

II. Methodology

Research Design and Strategy

The descriptive method of research will be use in this study to gather information, describe and interpret the effectiveness of blended learning to Rosales District II learners in relation to their academic performance. According to McCombes (2019), descriptive method of research aims to accurately and systematically describe a population, situation or phenomenon. It can use a wide variety of research methods to investigate one or more variables.

Furthermore, Nassaji (2015) explained that the goal of the descriptive research is to describe a phenomenon and its characteristics. This is more concerned with what rather that how or why something has happened. In addition, it includes all studies that support to present facts concerning the nature and status of anything which one may want to study (Vizcarra, 2003).

Since the effectiveness of blended learning in relation to their academic performance, social and emotional of the Rosales District II learners, the descriptive method is deem appropriate.

Population and Locale of the Study

The respondents comprise of the teachers of Rosales District II during the last two consecutive academic years (2020 - 2021 and 2021-2022).



Table 1: Population of Rosales District II Table 1 N= 62

Calcard	Grade Level			
School	Grade 4	Grade 5	Grade 6	Total
Acop ES	2	2	1	5
Bakit Bakit ES	1	1	1	3
Balincanaway ES	1	1	2	4
Calanutan ES	1	1	1	3
Capitan Tomas ES	2	1	2	5
Carmay ES	1	1	1	3
Casanicolasan ES	1	1	1	3
Li Seng Giap ES	1	1	1	3
Rizal ES	1	1	1	3
Rosales North Central School	3	2	3	8
Salvacion ES	1	1	1	3
San Angel ES	1	1	1	3
San Antonio ES	1	1	1	3
San Luis ES	1	1	1	3
San Pedro East ES	1	1	2	4
San Pedro West ES	1	1	1	3
San Vicente ES	1	1	1	3
TOTAL	21	19	22	62

Figure 2 below shows the map of Rosales District II and the legend.



Figure 2: Map of Rosales District II



Data Gathering Tools

The researcher used the validated questionnaire as instrument in gathering data for this study. This served as the base of this study.

Data Gathering Procedure

The researcher sought permission from the district supervisor of the Rosales District II and also to the school heads of different schools in Rosales District II. The researcher got information through questionnaire form to the teachers of the different school in Rosales District II.

Treatment of Data

The following statistical tools used in the analysis of the data gathered.

For problem number one which dealt on the profile of the respondents, and question number two which dealt about the blended learning approach used in Rosales II, frequency counts and percentages was employed.

The percentage formula to be use below.

$\mathbf{P} = \mathbf{f}/\mathbf{n} \ge 100$

Where:

P = percentage

f = frequency

n = total number of respondents

To answer question number 3 which dealt about the significant difference between the academic performance of Rosales District II learners in Academic Years 2020-2021 and 2021-2022 learners in relationship to their academic performance, the Analysis of Variance (ANOVA) used.

To answer question number 4 which determine the relationship on the academic performance, social and emotional of Rosales II learners on blended learning approach, and question number 5 question number 5 which dealt about the challenges encountered in the implementation of blended learning approach, frequency counts and percentages was employed.



The percentage formula to be use below.

$\mathbf{P} = \mathbf{f}/\mathbf{n} \ge 100$

Where:

P = percentage

f = frequency

n = total number of respondentshe

III. Results and Discussion

This chapter presents the results, analysis, and interpretation of data relative to the questions raised to determine the effectiveness of blended learning approach to Rosales District II learners in terms of academic performance, social and emotional.

Table 2 presents the profile of the respondents in terms of age, sex, civil status, highest educational attainment, status of appointment, position, number of years in the service and relevant trainings attended. It can be gleaned in the table 2 that: in terms of age, majority of the respondents belong under the age bracket of 30-39. s of academic performance, social and emotional.



Table 2 Respondents' Profile			
	Frequency	Percentage	
Age			
50 and above	1	2	
40 - 49	15	24	
30 – 39	46	74	
20 and below	0	0	
Sex	-	-	
Male	15	24	
Female	47	76	
Civil Status			
Single	17	26	
Married	47	74	
Separated	0	0	
Widowed	ů 0	ů 0	
Highest Educational	0	0	
Attainment			
PhD / EdD Holder	1	2	
PhD / EdD Academic	5	8	
Requirements	5	0	
PhD / EdD Units	2	3	
MA/MS Holder	23	37	
MA/MS Holder MA / MS Academic	8	13	
Requirements	8	15	
MA/MS Units	21	34	
BSE / BeEd Graduate	21	3	
Position	2	5	
Master Teacher I-III	3	5	
Teacher I-III	5 59	95	
	0	0	
Teacher-in-Charge	0	0	
Years in Service	1	2	
21 and above	1	2	
16-20	3	5	
11-15	33	53	
6-10	18	29	
5 and below	7	11	
Relevant Trainings	1	2	
International	1	2	
National	0	0	
Regional	1	2	
Division	43	69 26	
District	16	26	
School	2	3	

Table 3 shows the school classification and the blended learning approach used by the respondents. It is revealed in this table that majority of the respondents or forty-seven percent were in medium school, twenty-four or thirty-nine percent were in small school, nine or fourteen were in large school, there are no one respondents in mega school classification. The schools' ca tegory was based on 2017 Brigada Eskwela Implementing Schools Category

Blended Learning Approach Used			
	Frequency	Percentage	
School Classification			
Mega	0	0	
Large	9	14	
Medium	29	47	
Small	24	39	
Blended Learning Approa	ch Used		
Face-to-Face	62	50	
Online	6	5	
Modular Print	56	45	
Modular Digital	0	0	

Table 3:

Table 4 presents the Analysis of Variance (ANOVA) results on the significance difference between the academic performance of Rosales District II learners in School Year 2020-2021 and 2021-2022. The Sum of Squares (SS) between groups is 4,369 while within groups is 0.041. The Degrees of Freedom (DF) between groups is 1 wherein the mean square (MS) is 4.369 while within groups, the DF is 4 wherein the MS is 0.010.

ANOVA Results on the Difference between SY 2020-2021 & SY 2021-2022						
Source of Variation	SS	df	MS	F	F crit	
Between Groups	4.369	1	4.369	436.9	7.709	
Within Groups	0.041	4	0.010			
Total	4.409933	5				

Table 4:

This validates the study of by Pratt, (2019) entitled Blended Learning in Elementary Schools that an Interdependent Enterprise Innovation in technology has provided passionate growth and opportunity, while inciting demands of those who have access and those requesting it. Blended learning is transformational and interesting, it presents chaos into the educational

institution, and it directly answers to the three most important desires of educational leaders today. Many researchers have identified the rewards of blended learning in higher education.

JAMS

Table 5 presents the blended learning approach in relation to academic performance of Rosales District II learners. It can be deemed that majority or 60 of the respondents' profile are curious learners who are always asking questions and wants to know more and more about whatever topic we are covering in class. Fifty-five or 88.7% of the respondents' pupils gain understanding in the lesson, got an in-built desire to learn and grow, and always comes into the classroom ready to gain more knowledge. Fifty-one or 82.3% of the respondents' pupils had enrich knowledge and skills towards academic achievement.

 Table 5:

 Blended Learning Approach in Relation to Academic Performance of Rosales District II

 Learners

Learners		
Indicators	Frequency	Percentage
Pupils gain understanding in the lesson	55	88.7
Pupils identify the methods of effective study habits toward lifelong		
learning.	43	69.4
Pupils demonstrate effective study habits	48	77.4
Pupils apply lessons from home, school and community to daily		
living with consideration to family and society.	48	77.4
Pupils enrich knowledge and skills towards academic achievement.	51	82.3
Pupils got an in-built desire to learn and grow, and always comes		
into the classroom ready to gain more knowledge.	55	88.7
Pupils are always prepared, and keen to contribute their ideas to		
class discussions.	43	69.4
Pupils are curious learners who are always asking questions and		
wants to know more and more about whatever topic we are covering		
in class.	60	96.8
Pupils step up their focus and study more diligently to increase their		
grades.	48	77.4
Pupils meet standards across all subjects and exams.	43	66.4

Table 6 presents the blended learning approach in relation to social performance of Rosales District II learners. Sixty or 96.8% of the respondents' pupils have collaborative mindset makes them a good team member. They listen to their peers and take their ideas in mind when coming up with a group plan, are energetic who brightens up the pupils around her and always sees the lighter side in life, and make efforts to connect with their peers.



Blended Learning Approach in Relation to Social Performance of Rosales District II Learners

Indicators	Frequency	Percentage
Pupils are competent at social aspects of learning including group work and presentations. Pupils' collaborative mindset makes them a good team	55	88.7
member. They listen to their peers and take their ideas in mind when coming up with a group plan. Pupils are compassionate classmate who often looks out	60	96.8
for their peers and makes sure everyone is okay.	59	95.2
Pupils are consistently at high standard. I can rely on them to always put their best foot forward.	45	72.6
Pupils are easy-going classmate who are always happy to learn with their classmates.	45	72.6
Pupils are energetic who brightens up the pupils around her and always sees the lighter side in life. Pupils are goal-oriented. They set a series of small goals	60	96.8
at the beginning of the week and work toward others diligently.	55	88.7
Pupils are always helpful around class. They support their fellow pupils when they need peer support and will always volunteer to help them.	45	72.6
Pupils are reliably polite pupils in class who will always go out of their way to ensure people around them that they	-	
are comfortable within the learning space.	56	90.3
Pupils make efforts to connect with their peers.	60	96.8

Table 7 presents the blended learning approach in relation to emotional performance of Rosales District II learners. Fifty-nine of the respondents' pupils give a great effort even when they weren't the most naturally talented pupil at a particular task, and pupils' introspective nature makes them good at reflecting on their weaknesses and identifying avenues for self-improvement.



Table 7:

Blended Learning Approach in Relation to Emotional Performance of Rosales District II

Indicators	Frequency	Percentage
Pupils come to class every day with a big smile on her		
face and a willingness to get involved in all the classroom		
tasks.	53	85.5
Pupils give a great effort even when they wasn't the most		
naturally talented pupil at a particular task.	59	95.2
Pupils are active learners who love to get hands-on and	10	
throw themselves into a task with enthusiasm.	42	67.4
Pupils show interest in self-improvement and getting the most out of each class.	54	87.1
Pupils are inspired learners, they often coming to class	54	07.1
with questions they thought up overnight and they		
consistently seeks new opportunities to learn.	53	85.5
Pupils' introspective nature makes them good at	00	00.0
reflecting on their weaknesses and identifying avenues		
for self-improvement.	59	95.2
Pupils are motivated learners who will regularly go ahead		
of their classmates to seek out more knowledge and		
information on the topics.	48	77.4
Pupils are reflective, they regularly able to tell both their		
strengths and weaknesses and they can tell about what		
they went well and what did not go so well during		. . .
activities.	53	85.5
Pupils are impressively self-aware. They are able to report		
on their own progress and identify when they need	10	77.4
additional help. Pupils love to engage in inquiry based learning projects	48	77.4
and thinks about big picture questions.	49	79
and unites about org picture questions.	т <i>у</i>	12

Table 8 presents the challenges encountered by the teachers in the implementation of blended learning approach. It shows that majority of the respondents or 48.39% were encountered learners' difficulty in independent learning. Six of the respondents or 9.68% encountered pupils' lack of gadgets or equipment and distracted from social media. Five or 8.06% has negative attitude of parents towards the learning of their children. Four of the respondents or 6.45 has encountered insufficient load/data, unstable mobile or internet connection and conflict with other activities. Two or 3.23% of the respondent encountered teachers' overlapping of activities, One or 1.61% of the respondents were lack of regular supervision, monitoring and evaluation by higher authorities; and there were no respondents having existing health conditions.



	Table 8:			
Challenges Encountered				
	Frequency	Percentage		
Pupils' lack of gadgets or equipment	6	9.68		
Insufficient load / data allowance	4	6.45		
Unstable mobile / internet connection	4	6.45		
Existing health condition/s	0	0		
Difficulty in independent learning	30	48.39		
Conflict with other activities	4	6.45		
Negative attitude of parents towards the	5	8.06		
learning of their children				
Distraction such as social media	6	9.68		
Teacher's overlapping of activities	2	3.23		
Lack of regular supervision, monitoring and	1	1.61		
evaluation by higher authorities				

IV. Conclusion

The study on the relative effectiveness of blended learning approach in relation to the academic performance, social and emotional of Rosales District II learners can be concluded that modular print was the modality used in different schools in Rosales District II during the School Year 2020-2021. Moreover, during the School Year 2021-2022, Blended learning was the modality used by the different schools in Rosales District II.

REFERENCES

- [1] Abel V. Alvarez, J. (2020). Retrieved from Asian Journal of Distance Learning: https://files.eric.ed.gov/fulltext/EJ1285361.pdf
- [2] BIMAL CHANDRA MAL, D. H. (2020). CONSTRUCTIVISM-BASED BLENDED. Association of Indian Universities, New Delhi (India), 2020.
- [3] ChildHope Philippines. (2021, October 12). Retrieved from https://childhope.org.ph/alternative-learning-online-education/#
- [4] Cleveland-Innes, M. (2021). Guide to Blended Learning. In D. Wilton. Athabasca University, Canada: COMMONWEALTH OF LEARNING.
- [5] Cruse, E. (2017). Retrieved from https://www.safarimontage.com/pdfs/training/usingeducationalvideointheclassroom.pdf
- [6] Gradecam. (2020, September). Retrieved from https://gradecam.com/2020/09/what-isblended-learning-and-how-does-it-work-in-theclassroom/#:~:text=When%20it%20comes%20to%20blended,engage%20in%20common%2 Otasks%20online.
- [7] Khader, N. S. (2016). Retrieved from https://files.eric.ed.gov/fulltext/EJ1126508.pdf
- [8] Kundu, A. (2018). LearnTechLib. Retrieved from https://www.learntechlib.org/p/180971/
- [9] Llego, M. A. (2020, May 27). TeacherPH. Retrieved from Buhay Guro: https://www.teacherph.com/deped-learning-delivery-

JJAMS INTERNATI

modalities/#:~:text=%2Dlibrary%20(Kindle)-

 $, Blended \% \, 20 Learning, TV\% \, 2FRadio\% \, 2D based\% \, 20 Instruction.$

- [10] Masri, D. A. (2020, August). Retrieved from International Journal of Education Research and Reviews: https://www.researchgate.net/profile/Amaal-Masri/publication/343982200_The_effectiveness_of_using_blended_learning_for_teaching_ English_language_vocabulary_for_1_st_grade_students_at_Al_Tafila_Directorate_of_Educa tion/links/5f4dfa2e299bf13c50744e80/The-ef
- [11] Miscellaeous. (2021, April 5). TCI. Retrieved from https://www.teachtci.com/blog/types-ofblended-learning-models/
- [12] Nugraha, D. M. (2020). Station Rotation Type Blended Learning Model Against Critical Thinking Ability of Fourth Grade Students. Journal of Education Technology, 516-523.
- [13] Pratt, C. J. (2019, February 1). Retrieved from https://dune.une.edu/cgi/viewcontent.cgi?article=1200&context=theses
- [14] Quigley, E. (2019, January 17). LearnUpon Blog. Retrieved from https://www.learnupon.com/blog/what-is-blended-learning/
- [15] R. Obiedat, L. N.-H. (2014, March 18). LearnTechLib. Retrieved from https://www.learntechlib.org/p/182487/
- [16] Sacramento, Maricel G., Gina Ibanezr, Victoria Castillo Magayon. (2021). Technology adaptation of teachers and students under the learning continuity plan: A case of one school in the Philippines. International Journal of Learning and Teaching, Vol. 13 No.4.
- [17] Setyaningrum, W. (2019). Creative Commons Attribution-ShareAlike 4.0 International License. Retrieved from Jurnal Riset Pendidikan Matematika: https://journal.uny.ac.id/index.php/jrpm/article/view/21428
- [18] Siswo Dwi Martanto, S. E. (2021, February 21). Journal of Educational Social Studies. Retrieved from https://scholar.google.com.ph/scholar?hl=en&as_sdt=0%2C5&as_ylo=2021&as_vis=1&q=b lended+learning+in+elementary+school+in+teaching+history+&btnG=
- [19] Suyat, E. (2016). Teaching Approaches in Technology and Livelihood Education (TLE). Urdaneta.
- [20] Taylor, D. K. (2020, July 6). LinkedIn. Retrieved from https://www.linkedin.com/pulse/clean-green-environment-leads-good-health-dr-d-n-gandhi#:~:text=Clean%20and%20green%20environment%20imply,gases%20and%20giving %20out%20Oxygen.
- [21] The LawPhil Project. (2022, July). Retrieved from https://www.lawphil.net/