

# Blended Learning – An Approach in Philippine Basic Education Curriculum in New Normal: A Review of Current Literature

Fernan Peniero Tupas<sup>1,2,\*</sup>, Marilyn Linas-Laguda<sup>3</sup>

<sup>1</sup>Department of Biology, Northern Iloilo Polytechnic State College, Estancia, Iloilo, Philippines

<sup>2</sup>International Research Fellow, Japan Society for the Promotion of Science, Tokyo, Japan, and Laboratory of Biotechnology and Bioengineering, Hokkaido University of Education, Hakodate, Hokkaido, Japan

<sup>3</sup>Department of Teacher Education, Northern Iloilo Polytechnic State College Concepcion Campus, Concepcion, Iloilo, Philippines

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**Abstract** This qualitative research focused on literature reviews. The method utilized was document analysis. The articles were from 2010-2020 taken from different websites and documents from libraries of Hokkaido University of Education and Northern Iloilo Polytechnic State College. The results showed blended learning started three decades ago, specifically for higher education institutions (HEIs), also used in graduate programs and professional development. But in 2007, in the Philippines, the Center of Blended Learning started and had very positive responses from the parents and students. Moreover, blended learning (BL) is adopted in subjects like English explicitly in Language, Science, and Distance Learning. The use of BL in education helps students engage positively in all activities and increased behavior towards learning, and empowered to become leaders, coaches, and mentors to fellow students. Teachers, as necessary instruments for effective implementation of BL, the conduct of professional development is vital. In the country, DepEd proposed to use online learning, modular approach, radio-television methods, face-to-face, and para-teachers for blended learning. But the lack of facilities like gadgets or computer sets, and connectivity in the Philippines is a unique challenge to DepEd. The education sectors asked help from different government agencies and private

individuals and organizations to support the proposals. This study suggests tapping experts to conduct studies BL to help the education system in the new normal. Each school must document all the positive and negative experiences with BL. DepEd consolidates all the collected undertaking during a pandemic and creates a framework to enhance blended learning.

**Keywords** K12 Curriculum, Published Researches, Pandemic, Strategies, Effectiveness

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## 1. Introduction

The education system is one of the agencies profoundly affected by a coronavirus. Around 1.2 billion students in 186 countries are out of school during the pandemic. This COVID-19 changed the education landscape dramatically [1]. Many nations attempt to open classes after a month of lockdown, but many failed. For instance, in Canada, 12 students tested positive in May, and in South Korea, two brothers have the virus on June 29 upon restriction was lifted [2]. Thus, countries like Belgium and Japan adopted an alternative school schedule and lowered students' numbers per classroom to have space between learners to

protect them from infection [2]. Other countries also tried to continue classes using different innovations to protect students from COVID-19 spread and unsuccessful. From putting plastic in the desk served as a shield to a limited number of students to health, protocols are some of the many nations' required guidelines to allow to continue classes this school year.

President Rodrigo Roa Duterte states no opening of classes during this pandemic; "No Vaccine, No Opening of Classes." But Secretary Briones of the Department of Education (DepEd) insisted on adopting an alternative new normal approach. The proposed opening of classes, utilizing technology such as cellphones, tablets, and desktop with internet connectivity, modular and face-to-face, and other forms of instructional materials. Education always plays an essential part in the country's growth and development [3].

By the number of infected Filipinos all over the archipelago increased exponentially. Thus, the government is more concerned about the health of Filipino children than the quality of education. Therefore, senators like Honorable Sherwin Gatchalian filed Senate Resolution No. 391 about the postponement of the opening of classes in August. Furthermore, the senators recommended the use of distance learning. However, Senate President, Honorable Tito Sotto III states to have changes in the Republic Act No. 7977, also called the Act on Lengthening of School Calendar revision is required. According to RA 7999, the opening of classes for a basic education shall start on the first Monday of June but not later than the last day of August [4]. Upon talks with advocates of quality education and curriculum experts from DepEd, they decided to adopt a blended learning approach.

Thus, this study aims to identify the effectiveness of Blended Learning in the education system to help the Philippines in the new normal.

## Background

The Republic Act 10533, also known as K12 Basic Education Program, changed the old curriculum into a new one adding two years in Senior High School. The new curriculum focused on critical thinking and scientific skills in the 21<sup>st</sup> century for the country's economic and social progress. The new programs aim to train learners equipped with the necessary skills and knowledge, choice after SHS – to find a job or continue to college [5]. Basic Education starts from kindergarten at around five years old, transitioning from informal to formal education to grades 1 to 12. During this period, the teaching method focused on play-based activities- the competencies are still developing holistic among learners [6]. In grades 1 to 10, students will experience an enhanced, context-based, and spiral approach curriculum. While in senior high school (SHS), learning is concentrated to allow students for jobs, college life, and 21<sup>st</sup>-century skills [7].

The curriculum should be designed to focus on subject-centered, learner-centered, and problem-based centered, incorporating various learning theories [8]. Thus, the Philippine Education Standard works with current trends and innovations. Also, she stressed in learning competencies, DepEd should design contents that can help improve learners' skills and values to become the country's reproductive citizens. To make all this happen, teachers play an essential role in the implementation of the new curriculum. They should possess the following commitment to work, competences, creativity, compassion, and character [9].

The innovative curriculum helps save the old problematic education system; these are evident in local and international assessments. The results are always below the national standards, and the Philippines placed the lowest among participating countries. Furthermore, inside one classroom, 45 or more students are found, far from the Department of Education (DepEd) ambition, to have lesser numbers in the implementation of K12. A large number of students per class are due to limited classrooms and teachers. Subjects are taught one hour per day, four times a week. Classes usually start from 7:30 AM and ended around 5:00 PM [10].

The new normal caused by the public health emergency COVID 19 is that people must wear masks, coupled with physical distancing and handwashing. This coming School Year (SY) 2020-2021, DepEd expected 27 million to enroll. In the new normal, DepEd is finding ways not to disrupt the opening classes on August 24 but immediately changed to October 5, 2020, [11]. During the quarantine period, ALS (Alternative Learning System) in the Mindanao region used technological platforms such as ICT4ALS, FB Chat, Google Classroom, the Aral Muna app, and DepEd Commons. The department also proposed using radio-based intervention—the partnerships with local radio stations as a medium to conduct lessons that can be replied to by phone. To those who have no access to technology and connectivity, door-to-door delivery of worksheets, take-home learning activity sheets, and take-home portfolio completions are also suggested by the expert [12].

Blended learning is not new to the Philippine Education System since many colleges and universities around the country already adopted these concepts a long time ago. But DepEd suggested that during this pandemic, traditional approaches shifted into blended learning. The DepEd secretary told using all alternatives to disrupt the opening of classes this coming SY 2020-2021 [13].

The use of technology in public schools in the country is always a significant challenge to the national government, coupled with the home environment- conducive for Learning [10]. However, DepEd proposed to realign funds from projects and programs from maintenance and other operating expenses or MOOE budget and pressure Local Government Units' (LGUs) special education fund (SEF) as a counterpart to support the effective implementation of

blended learning in the country. They also stressed that various stakeholders' help is vital to help learners, especially those who cannot afford to have all the facilities [14].

To protect students from COVID19, teachers all over the country accepted the task from traditional teaching to new normal. Many of them find ways or even asked younger generations to help them to navigate the new and unique learning style, equipped to give quality education to their learners. The lack of internet connections does not hinder teachers' enthusiasm for learning the new approach [15].

In the 1990s, publishing original qualitative research on BL and 2000, many experts on BL's effectiveness started releasing. In the literature review with BL, many teachers' issues were found, such as pedagogical implications [16]. Teachers must select suitable methods for learners and potential barriers that affect the effectiveness of the approach [17]. But in the Philippines, limited documents showed the success of BL in the education system; thus, the researchers were motivated to engage in this study to help the basic education in the implementation of BL in new normal.

## 2. Methods

This qualitative research specifically focused on the literature review to survey the effectiveness of Blended Learning in the education system. The method employed was document analysis. Table 1 shows the theme and number of articles collected to review.

**Table 1.** Number of Articles Collected to Review

Theme	Article
History and Concepts	10
Higher Education	10
Various Pedagogy	10
Impact of Blended Learning	10
Online Articles related to BL	25
<b>Total</b>	<b>65</b>

The sources are journals and articles taken from different websites. This relevant literature was analyzed, synthesized, and critically evaluated to learn how to help the Philippine basic education system in new normal. The articles were collected dated 2010 up to the present. The two researchers read all the collected materials. Individually, they analyzed and compared their outputs and submitted them to 5 experts for comments and suggestions.

The themes selected in this study based on the preliminary data collected and evaluated by different experts in education. A total of 65 articles were taken from various journals from the internet and the library at Hokkaido University of Education, and Northern Iloilo, Polytechnic State College. The researchers rigidly

analyzed, coded, and themed the articles.

## 3. Results

### 3.1. Blended Learning: History and Concept

Blended Learning (BL) rapidly has given value in the academe's fixed areas started three decades or more ago [18]. In the eighties, the rise of personal computing and the nineties worldwide was introduced; thus, the education system introduced new learning methodology. Therefore, as early as 1999, BL was presented and widely used by experts as a new approach [19]. With the availability of different designs, BL is challenging to define due to its complexity [20]. BL integrates techniques, such as face-to-face, online strategies, and technology [21] [22]. BL, as a new traditional model, is widely adopted in higher education. Also, BL is often called a hybrid approach in IHEs. Thus, BL is a "*combination of online and in-class instruction with reduced in-class seat time for students*" [23]. Also, BL is a mixture of constructivist principles and electronic teaching [24].

In the early implementation of blended learning, this referred to as technologies, pedagogies, and even job tasks as a whole. Hence, BL is defined as a combination of different instructions for significant results [20]. Also, he stated that BL is an operation pf model of teaching and style of learning. In general, BL is a combination of online delivery incorporating the best classroom practices to personalized approaches to cater to diverse groups of learners. BL provides various advantages in the learning process [22].

But basically, BL is divided into three types; skill-driven, attitude-drive, and competency-driven. Skill-driven focused on the gaining of specific knowledge and skills. The instructor plays a significant role as they are the ones giving comments and suggestions. In contrast, attitude-driven depends on the interaction between peers and groupings. The improvement of a new attitude and behaviors relies on people working during lessons or activities. And the competency-driven is about working with experts. Knowledge and skills acquired depend on mentoring [19]. Thus, teachers required the knowledge needed to equip with skills and abilities about BL.

There are six models as an effective method to embed BL in the curriculum, such as face-to-face, rotation model, flex model, online model, self-bled model, and enriched virtual model. But later deleted model 1 and merge model 4 and 5, and finally have the rotation, flex, self-blended, and enriched virtual model as the new basis for implementing BL in the pedagogy [19].

One of BL's advantages is switching passive learning to active learning that allows students to read, speak, and think. Also, learners can choose between working with groups or do online and face-to-face individually. Furthermore, teachers can assess learners' interest, accountability, and real evaluation through human

consideration. The teachers can tailor instruction based on the levels of each learner [22]. And lastly, BL can offer both worlds; both teachers and learners have better flexibility and accessibility without losing face-to-face contact. Using e-learning combined with the classic form of contact teaching is suitable to learners and favors them: BL, students exposed to different learning experiences, both social presence and interaction [17].

With the advent of technology and the current trend, just like in Education 4.0, blended learning is best suited. With the pandemic, almost six months of lockdown, and many schools closed, blended learning is quite the education solution. In the Philippines, the Center for Blended Learning in Cubao Quezon City was founded in 2007 using an active classroom setting approach and homeschooling. Parents soon after noticed that their children enjoyed the BL approach than regular school. The center expands to connect with international mentors—the benefits of homeschooling and learnings from peers and teachers [25].

### 3.2. Blended Learning: A Strategy in Modern Time

The study sponsored by Sloan Consortium or commonly known today as Online Learning Consortium, revealed around 65.2% of the participating institution of higher education (IHEs) offered blended courses. There are about 35% of the higher education led to the utilization of BL. BL in higher education is interrelated with information communication technologies (ICT) but bound to contemporary human thought [24].

BL enhanced pedagogical values compared to purely e-learning in undergraduate nurses' clinical supervision skills. The confirmation to improve the importance of care and patient safety, the clinical skills supervision in health professional education must be enriched [21]. The study of the Savonia University of Applied Science in Finland on nursing students exposed the BL approach to help students gain knowledge on understating actual situations. This development is due to practice and theory aid to access expert and professional education and values [18].

As a profession, nursing should be research-based—nursing, together with Midwifery education, enhanced research to appreciate the evidence-based nursing practice. Thus, in higher education, the study is given importance as well as a more top priority. Hence, the BL approach has much to offer to encourage students to engage in the subject. The proposed module, composed of a traditional approach blended with e-learning teaching and results showed students experienced a wide range of instructions. Creating and presenting a research proposal to students allows using small group tutorials and seminars with mentors' help. But to enhance knowledge about the research, lectures, and the e-learning environment and continuative information are available [26].

Blended learning appears to have a consistently positive

effect in comparison with no intervention. It seems to be more effective than or at least as effective as nonblended instruction for knowledge acquisition in health professions. Moreover, pre-post test study design, exercises, and objective outcome assessment in blended courses could improve health care learners' knowledge acquisition. Due to the significant heterogeneity, the conclusion is treated with caution [17].

Medical students always encounter different challenges to become a doctor. In state-of-the-art development, medical schools shifted into e-learning; thus, BL gained popularity among medical colleges. Blended learning is better than traditional education. Medical students as adult learners required new learning; BL is a practical approach to teach family medicine. Educators may apply BL to other clinical medical sciences. E-learning gives a new concept for educational tools, interactive, self-paced, and easy access. Through BL, teachers act as the facilitator of learning [27].

In the graduate program, face-to-face and online instruction experiences are a new trend but given less importance. The methodology of combining traditional and current trends offers an operational education system to maximize the advantages of separate educational models [28]. Furthermore, online gadgets and equipment are alternative support from the student-centered approach to learning in the graduate program, specifically in in-service and preservice teachers, more effective and efficient [28]. Teachers taking the graduate program or professional development who live in areas far from the college or university campuses prevent them from attending regular classes or full-time courses, and blended learning is an innovation [29].

Also, instruction in implementing BL in the curriculum is critical – they must also blend effective for positive results [28]. Teachers should always plan the implementation of BL [17].

The study about Technological, Pedagogical, and Content Knowledge (TPACK) linked to a blended learning environment showed a slightly significant increase in mean scores in the experimental group. Thus, the study suggested enhancing the TPACK and blended learning environment to rural areas in the country [30].

An effective curriculum means interactive learning, both teachers and students [28]. BL, as an innovative trend in education, is linked to various fields of knowledge. BL has often differentiated between traditional and online. In English, computer-assisted language learning is now commonly adopted by teachers to make learning interesting, fun, and engaging. Learning English is difficult, specifically inside the classroom. The challenges are always about the meaning of some words and the fluency to speak the language. Teachers are often encouraged to create innovations to motivate learners to study English [31].

BL enriches the English learning process, helps

communication skills, and enhances the English learning environment [32]. Furthermore, BL aids learners in speaking, listening, reading, and writing skills. The method is an effective way to develop the skills of students in the language [33] [34] [35]. BL combines the positive side of the traditional approach and online learning to improve learners' participation in the lesson. Also, BL provides learning materials and teachers' roles, learners' engagement, and the social environment. In the application of BL in the lesson, the main steps like planning, designing and developing, implementing, and reviewing and evaluating are required [31]. Furthermore, teachers in foreign languages utilized e-learning more utilized than science subjects [19]. In distance education, around 12% of 12.2 million enrolled adopting the concept of BL [24].

BL's effectiveness using the relationship between characteristics, design features, and learning outcome showed that technology quality, online tools, face-to-face support, and students' attitudes and self-regulation are significant predictors for learning outcomes. Furthermore, family support is essential in learning outcomes in BL's implementation, but learners' workloads lead to students' drop-out. Also, little time to study has a high impact on students' learning [36].

The online tools help to teach using contextualization and generating an excellent learning environment [28]. Furthermore, BL motivates students through teachers' presence, acting as facilitators of learning [17].

### 3.3. Impact of Blended Learning in Education System

The benefit of a blended learning approach, such as students have no particular guideline when to study and able to draw resources as many as necessary. Furthermore, students can pick a task that best suits his or her learning level and style. Teacher resources, like vodcasts, serve as reviewers. They can learn and play their favorite online games and can recount an understanding of the topics through claymation storytelling [37].

Furthermore, grade 9 boys used online games were successful in learning English. Tools like virtual conferencing, social networking, and gaming were prevalent and increased students' engagement [38] in ICT utilization lessons. Another unique contribution of BL to students becomes active in helping peers and team activities – they are given responsibilities to act as leaders, mentors, or coaches [39].

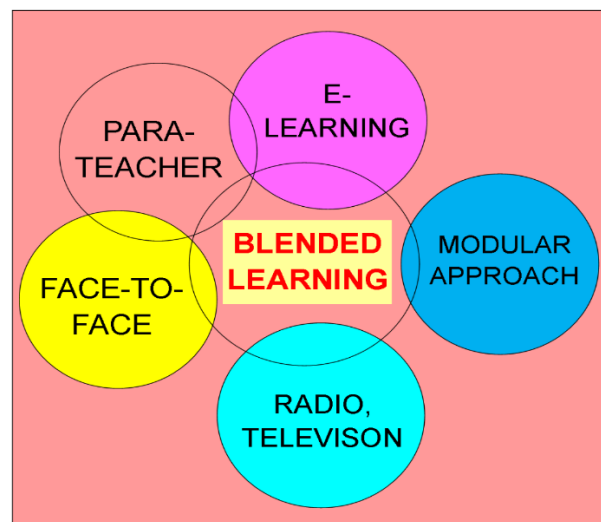
However, many experts and researchers claimed the success of blended learning is hard to define. The implementation of the approach always depends on teachers' acquired knowledge from training and workshops attended. The interest of teachers to adopt the methods are still vital for the success of BL. Technology act as a supplement for learning; thus, measuring the effectiveness is always complex [38].

In reality, many Filipino teachers are new to blended

learning and haven't formally trained. Thus, teaching them the difference between online and face-to-face is critical – professional development is appropriately enhanced [40]. One common problem in the Philippines, most of the professional development are content-based, hands-on activity, and follow-up and evaluation upon implementation in the workplace, play a crucial role in the accomplishment of BL. Thus, a different delivery mode, teaching methods, learning theories, learning styles, and competencies can help implement BL [41]. Added, sufficient materials and equipment, and course plans to support BL and feedback from teachers and learners are highly recommended. Furthermore, using BL enhanced students' interest and motivated them to learn effectively [35].

### 3.4. A Proposed Implementation of Blended Learning in the Philippines

Figure 1 shows the concept of blended Learning in Basic Education in the Philippines in the new normal.



**Figure 1.** Blended Learning in New Normal in the Philippine Basic Education Curriculum

Complete planning and policy are both vital for effective implementation of face-to-face and online sessions [29]. In this new normal, face-to-face is out, and e-learning is in [42]. Technological resources commonly used in BL are computers or smartphones and connection to the internet [29]. With limited support from far flank areas, experts and advocates suggested the use of radio and television. The Philippines had already utilized this system four decades ago with different networks [42]. DepEd, with partners local network and cable TV, and radio stations, conducted a test broadcast of sample episodes of learning materials [43]. The initiatives that help the success of BL are *flexibility, virtuality, and bimodality* [29].

The department is also working with printed self-learning modules for modular learning. Experts from

the DepEd prepared and updated previous materials for current use in the new normal [44].

#### 4. Discussion

The scarcity of teaching materials is commonly a problem of schools in the entire archipelago and still evident in the K-12 curriculum. Also, the DepEd provides instructional materials to all teachers as one of the new curriculum goals. With this, are DepEd ready for new normal? Are the facilities and equipment enough to have a new approach? What are the strategies of the department during this pandemic? These are the questions lingering in the public minds, confused if the education system will continue. Many parents have decided not to enroll their children for health and safety reasons.

Blended learning used in the new normal due to this COVID 19 can help save the country's education system. With proper planning and policy on implementing the suggested approach, teachers will find it easy, and the students will enjoy learning during the pandemic. However, to implement the BL, the government needs to provide all the required facilities. But if the government cannot afford to buy tools and equipment for millions of students. With the development of technology, it is time that our education system shifted to a more sophisticated approach. Thus, with all the aids of BL, students can shine in aptitudes other than old-fashioned literacies. Intercultural understanding through global connections is additional strength identified.

The studies proved the education system used B all subjects in elementary, junior high school, and senior high schools in the Philippines. But the availability of technology and connective is essential—the knowledge of teachers on how this approach implement is also vital. No study in the Philippines recorded using BL in basic education; however, big schools in the cities with complete facilities and equipment are already adopting the approach but unaware that it will be the trend in new standards during the pandemic. Parents who wanted to provide quality education find ways to buy a cellphone, tablets, and even desktops. However, local government units (LGUs) worldwide and other private individuals and organizations pledged to help distribute Filipino learners' gadgets. Even DepEd also announced that both teachers and students would be provided facilities for online learning, and called telecommunication companies to enhance connectivity.

The help of various stakeholders provides assurances that DepEd is on the right track of adopting BL in the new normal. The agency should also conduct training to help teachers implement the proposed strategies and approaches.

#### 5. Conclusions

BL, as a methodology in higher education institutions,

started three decades ago. Studies showed that BL has more enormous potentials than traditional teaching-learning with proper plans and policies and facilities such as computers and internet connectivity. Graduate programs and professional development, medical courses, and basic education focused on English and Science have already used BL in the curriculum. The collected articles' results showed face-to-face incorporating online learning creates challenges and supports students' motivation for learning. The students can learn while playing online games and use all teachers' instructional materials. Learners utilized the vodcasts for review. Thus, students shine in competencies aside from traditional literacies. But teachers' professional development is essential in the effectiveness of BL.

There are many impacts of BL in the education system worldwide using blended learning approaches despite its limitations. But above all, BL allows learners to have a pace for learning. Also, students can look for many materials and resources as necessary. In the Philippines, BL is not new; HEIs used this approach in different courses and basic education, specifically in big cities. But limited documents were published showing the effectiveness of face-to-face and e-learning. But the DepEd's proposal for the implementation of BL in new normal includes online learning, modular approach, radio-television, face-to-face, and para-teachers. But the time constraint, as well as financial support, are the common problem and issues encountered in the department.

Since there were very few teachers to guideline and evaluate learning during this pandemic, DepEd plan to hire para-teachers as alternate in implementing blended learning. However, this is an additional burden for the department because hiring will need time and training for these selected para-teachers.

This study suggested conducting researches on the implementation of blended learning in the entire archipelagoes.

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