University of the Philippines
College of Education

Stay Well, Keep Learning:
Education Resilience and Learning Continuity in the Time of COVID-19

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Emergencies catalyze tremendous changes in education in terms of learning delivery, resources, and environment. The COVID-19 pandemic has altered human engagement, systems operation, and resource allocation. It has shown a different compass for priorities and future plans, and education is compelled to navigate the world of teaching and learning using this. Amidst these changing dynamics, meeting the educational needs of learners remains front and center, that is, learners' rights to education remain protected and non-negotiable. The ultimate goals of education remain the same, but the processes through which the goals can be achieved have to be reimagined and done differently.

Despite the added challenges of the pandemic, it is imperative for education to continue. Education has a stabilizing effect on learners in times of emergencies. It often brings a sense of normalcy that softens the blow of vulnerability in times of disorder. In order to move forward in these challenging times, the education sector needs to demonstrate resilience – the ability to overcome adversity, a lifelong skill that it purports to develop among learners. As an organization or a community, staying resilient can mean finding opportunities amidst the chaos. For individuals within the sector, it can mean thriving despite difficult circumstances.

The University of the Philippines College of Education (UPCEd) offers this Education Resilience and Learning Continuity Plan (ERLCP) to guide policy makers, administrators, teachers, parents, and researchers across levels in adapting to short- and long-term changes that are brought about by the pandemic to the basic education system.

Presented perspectives are influenced by the core values of UPCEd, namely, leadership, service, collaboration, diversity, expertise, and inquiry. Specifically, the guiding principles of this ERLCP are the following:

- COMPASSION – prioritizes safety, health, and well-being of teachers, learners, and administrators; and emphasizes collaboration;
- INCLUSION – is sensitive to diversities, constraints, and vulnerabilities of stakeholders; and
- INNOVATION - builds on the strengths of existing practices, resources, and networks in upholding quality education.

This ERLCP presents the relevant general context of the Philippine vis-a-vis essential education and technology factors that should be considered during the pandemic. This is followed by discussions on remote learning, the varying needs of provinces across the country and the need for data on teachers' familiarity and confidence in implementing flexible learning options. Finally, eight key strategies for education resilience and learning continuity are presented.

Brief context of the Philippines vis-à-vis education and technology

In the Philippines, the COVID-19 pandemic has already affected 32.1 million learners across levels, including technical-vocational education and training (TVET). Even private educational institutions totaling to 19, 804 have not escaped the financial shock it brought. Revenue loss is estimated at PhpP55.2 billion with the late opening of the school year in August (Magsambol, 2020). The Department of Education (DepEd) assists high school students in private schools through the voucher program called the Government Assistance to Students and Teachers in Private Education (GASTPE). However, in the 2020 budget, the assistance only amounts to Php 31.18 B, which is down by almost a billion pesos compared to the 2019 budget. This can only cater to 766,695 students, which is 40% less than the total supported in the previous year (Romero, 2020). As education stakeholders craft their respective learning continuity plans, they have to consider that learners, teachers, and schools come from diverse situations and contexts; thus, a one-size-fits-all approach will disadvantage others. Because the dynamics have indeed changed, curriculum goals are not expected to be achieved using the same timelines, modalities, or platforms.

While remote learning is the widely held choice for ensuring education continuity during the pandemic, it is often misconstrued as limited to web-based learning only. Remote learning takes place whenever a student and teacher or source of information are separated by distance or time and are not confined in a physical learning space such as a classroom. It can be done through asynchronous (not happening at the same time) or synchronous (happening at the same time) sessions. While remote learning does use web-based platforms, the range of learning delivery goes far beyond this. It includes learning kits delivered to homes, TV broadcast, radio programs, WIFI-connected devices (e.g., mobile phones and computers), and micro-content deliveries (e.g., texting, and messaging through applications like WhatsApp, Viber, or FB Messenger). Regardless of modalities to be used on the field, what is important is for the paradigm of education delivery to evolve, because the face-to-face norm may no longer be a viable teaching-learning option in the near future.

Looking into the context of the Philippines, four factors have to be considered in implementing web-based remote learning: 1) internet speed, 2) access, 2) cost, and 3) nature of usage. Firstly, the Philippines has an average internet speed of only 5.5 Mbps, the slowest in Asia (Barreiro, 2017). Throughout the country, there are obvious differences in internet speed, which is said to be slowest in Visayas and Mindanao, and fastest in the National Capital Region (NCR) (Khidir, 2019). Secondly, only 67% of the population has access to the internet, with the majority of which doing so through mobile phones (Hootsuite, 2020). Thirdly, the cost of mobile internet per gigabyte (GB) is PhP22.50 (Mercurio, 2019). If an hour-long video with relatively good streaming were to be accessed, it would require about 0.6 GB and cost PhP13.50. Almost the same cost applies to an hour of participating in video conferencing or synchronous learning. With these

figures, the telecommunications sector should step up its service and provide more economical rates to students and teachers. Better internet infrastructure is needed now more than ever. Finally, in terms of internet use, Filipinos usually connect to Facebook, view Youtube videos, and stream movies and music for entertainment (Hootsuite, 2020). However, with the advent of massive online education, there will be a major shift in Filipinos' internet use, from social to educational purposes. This carries implications on the mindsets of internet users and the effectiveness of remote learning in meeting educational needs in the time of COVID-19.

Aside from looking at the factors above, the varying needs of different regions in the country have been reviewed. To date, NCR, Laguna, and Cebu City are in Modified Enhanced Community Quarantine (MECQ), while the rest are already in General Community Quarantine (GCQ). Learners from high-risk areas are likely to learn from home for a prolonged time, while those from low-risk zones are likely to return to schools when they reopen but with the possibility of staggered scheduling to ensure physical distancing. In either scenario, the feeding program in public elementary schools, which addresses undernutrition among K-6 students, will be disrupted. With a projected 120-day time frame, the feeding program aims to improve learners' nutritional status by 70% and increase their school attendance by 85% and above (DepEd, 2017). In 2019, the program had 1,836,793 student beneficiaries (Mateo, 2019). As a backlash of the ECQ, the number may increase, and the feeding program will definitely require restructuring due to school closure or staggered class scheduling for school year 2020-2021.

Finally, looking into teachers' prior knowledge and confidence in exploring flexible learning options, the Asia Foundation conducted a survey among 1,821 teachers, 85% of whom teach in public schools, while 15% work in private schools (Asia Foundation, 2020). Results show that teachers are somewhat confident to apply flexible learning options such as alternative delivery modes (ADMs), distance learning, homeschooling, online learning, and alternative learning systems (ALS). However, teachers raised the following concerns: poor internet connectivity, limited internet access, need for training on strategies and material development, insufficient resources (e.g., modules, learning materials, tests), and lack of computers, smartphones, and printers. Other challenges that teachers identified include students' readiness for flexible learning options, especially the younger learners in preschool and primary level, and the capacity and competence of parents to support their children to go through flexible learning. They said that some parents are teachers themselves, others are medical frontliners, some have been working-from-home even prior to the COVID-19 pandemic, and some parents may have to attend to the needs of several children in different grade levels.

Given the above constraints and diversities, it is imperative for the education sector to be compassionate, inclusive, and innovative as it embarks in recalibrating curriculum goals and assessment, using unfamiliar technology,

reimagining learning delivery, and redesigning the learning environment. In the succeeding sections, we present eight Key Strategies for Education Resilience and Learning Continuity in the Time of COVID-19. The strategies tackle the following major components of education: 1) teacher/student safety, health, well-being, and corresponding psychosocial support; 2) curriculum and assessment; 3) instruction, learning delivery, resources, and technology; 4) stakeholder engagement; 5) leadership, governance, communication and coordination; 6) learning environment, infrastructure; 7) education financing; and 8) research.

The strategies are suggestions, and stakeholders should decide which ones are best suited to their context by answering the following questions:

- Is it responsive to diverse learners?
- Is it equitable? inclusive? accessible?
- Is it a better solution?
- Does it provide quality education?

For each key strategy, the relevance of such in sustaining learning in times of emergencies is explained, relevant concepts are defined, and concrete suggestions are provided to concerned stakeholders.

8 Key Strategies for Education Resilience and Continuity in the Time of COVID-19

1. Prioritize teacher and student safety, health, and well-being.
2. Recalibrate curricular and assessment priorities.
3. Enact flexible learning options.
4. Empower families for home-based learning.
5. Lead for resilience and innovation.
6. Redesign the learning environment.
7. Evaluate education financing.
8. Create new knowledge.

Figure 1 shows the Education Resilience and Learning Continuity Framework. It symbolizes a bird's-eye-view analysis of the situation and challenges of the basic education system. The core is an icon that represents every school in the country that should be surrounded by 8 interconnected strategies that serve as its fortress and protection during a crisis and emergency. These strategies are placed at the center to revolve within the principles of compassion, inclusion, and innovation.

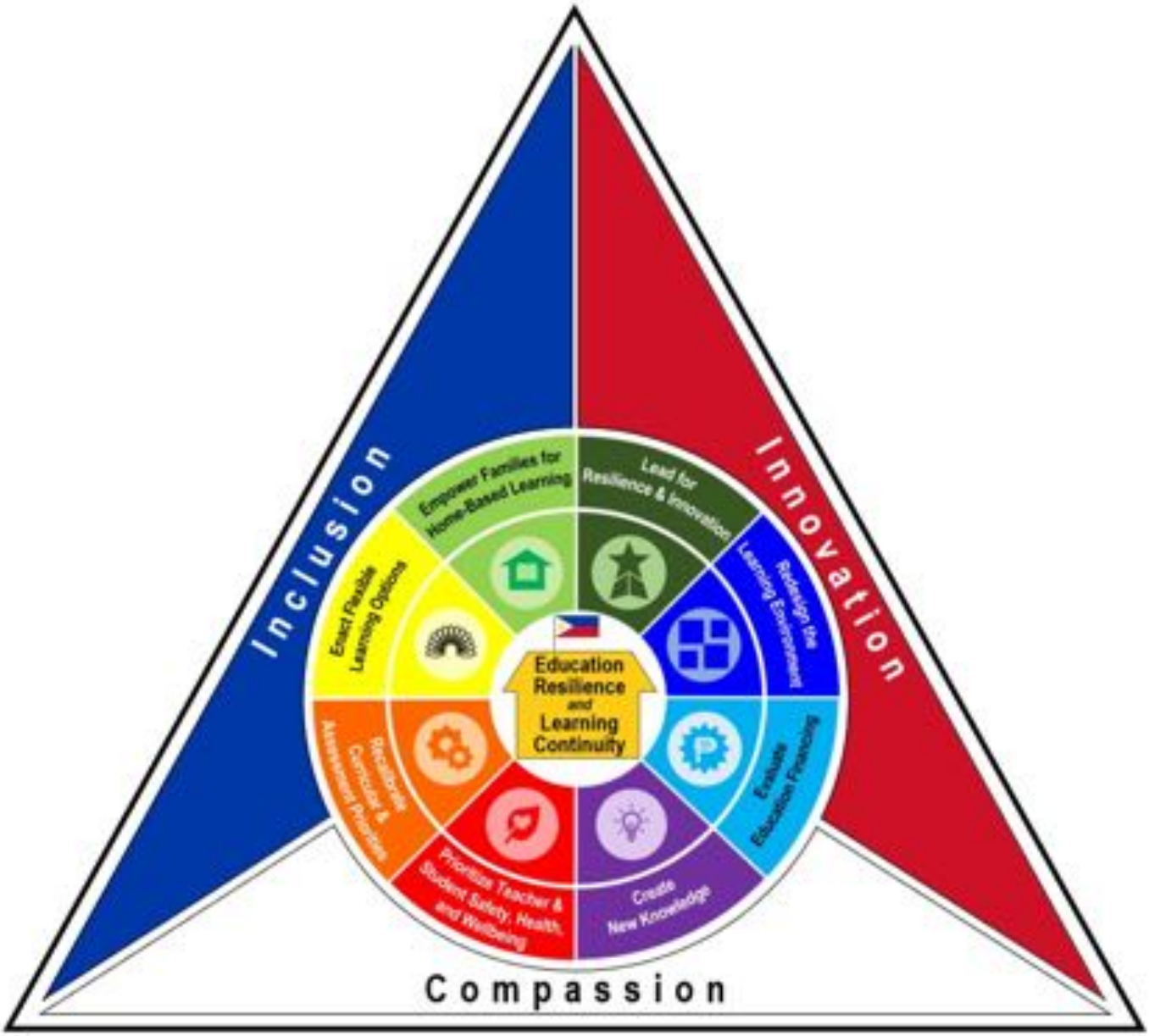

Figure 1. The Education Resilience and Learning Continuity Framework

School administrators should identify tasks for each key strategy and a timeline for implementation with reference to the resumption of school operations to fast-track a contextualized ERLCP. Each task can be operationalized by stating procedures clearly, identifying teachers and personnel that will be involved, and resources that will be needed.

Parents may be apprehensive to send their children to school when schools reopen. To allay parents' fears, school administrators should communicate details of the flexible learning options (FLOs) chosen by the school as well as the requirements needed for learning delivery. And when face-to-face classes are already possible, disseminate guidelines for the first day of school prior to the opening. Instructions can include: queuing for entry to and exit from school grounds or classrooms; protocols on temperature checking; use of common spaces such as cafeteria and library; and access to several handwashing stations in the campus. The more informed stakeholders are, the more confident they become that learning continues safely in school.

KEY STRATEGY 1

Prioritize teacher and student safety, health, and well-being

Due to the enforcement of community quarantine across the country, learners and teachers need to quickly cope with disrupted academic routines, limited interaction with peers, and a different physical space for learning or working. As they stay at home with their families, they experience the direct effects of the COVID-19 pandemic on their safety, health, relationships, emotional state, and even financial standing. Their mental health can become fragile. Previous research shows that health outbreaks can trigger mental health concerns such as depression, anxiety, trauma, suicidal tendency, and panic (Tuccie et al., 2017). In the case of young children, when drastic changes are left unexplained to them, they can be unnecessarily scared or guilty and can associate these unwelcome changes to their previous bad behaviors resulting in a misguided sense of causality (Dalton, Rappa, & Stein, 2020). Adolescents, on the other hand, can manifest emotional numbness, social withdrawal, or deviant behavior (UNICEF, 2020). Among adults, impulsive or erratic behaviors and conflicts among family members can surface because of the prolonged confinement and isolation (Vieira et al., 2020). Needless to say, the pandemic has affected and will continue to affect the safety, health, and well-being of learners, teachers, and their families. Thus, responding to these groups with compassion will help them adapt easily to new circumstances brought about by the pandemic.

Responding with compassion means sensing the vulnerabilities of others and helping them more effectively because of this knowledge. Now, more than ever, cultivate an open, safe, and nurturing learning environment. Some students and teachers might be having a harder time coping than others. Hence, provide compassionate support in various forms to those that need it the most. The following are some suggestions for this.

Do no harm.

Make sure that the education resilience and continuity plan is rooted in protecting learners and teachers from neglect, abuse, discrimination, or stigma. The “do-no-harm” principle means that interventions must not have negative effects on its beneficiaries. Deciding on a remote learning delivery mode should consider whether its corresponding resources/technologies could be an added stressor to learners, teachers, and their families. The “do-no-harm” principle can also be used to zero in on priorities. For instance, redesigning feeding programs should be done to ensure that learners who are nutritionally disadvantaged prior to the pandemic are still reached and served. Also, concomitant with the provision of measures to protect learners from the disease, there should be a mechanism to safeguard anyone who is infected from discrimination and stigma.

Communicate accurate information for proactive coping.

Being accurately informed about COVID-19 is the first step in lessening paranoia and anxiety. It can help establish a proactive stance for coping. When young learners understand how the infection is transmitted, they will appreciate the importance of washing their hands and maintaining physical distance, and they will become more vigilant in observing these measures. This can help them feel that they have a significant contribution in keeping their family and community safe. On the other hand, adults are greatly exposed to all types of credible and speculative information about COVID-19. Accurate information allows them to understand their context and strengthens their commitment to education resilience and learning continuity.

Integrate standard health protocol in school operations.

Institutionalizing a system to integrate the minimum health standards into the daily operations of the school becomes imperative in the context of face-to-face learning. Before schools can be reopened, non-pharmaceutical interventions (NPIs) and support mechanisms to ensure the health and safety of the school community should be in place. This includes stringent observance of physical distancing inside and outside the classroom (at least one meter apart) and in delivering essential health services such as the school feeding program. Water, sanitation, and waste management facilities, and hygiene and sanitary supplies particularly alcohol and soap should be provided. Implementing preventive and control measures such as staying home when sick, observing respiratory etiquette, regular handwashing, disinfecting high-touch surfaces, and cancelling assemblies is critical in breaking the transmission chain of COVID-19.

Provide psychosocial support.

A psychosocial support system is an essential part of educational institutions, especially during crises and emergencies. Make guidance programs and services accessible. Ensure that the following are continuously provided to stakeholders: appraisal services, information services, counseling services, placement and follow-up services, referral services, and research and evaluation services that address stakeholders' mental health and psychosocial needs. Make helplines available to help dispel feelings of isolation. Explore ways on how to further support learners who have special needs.

Practice self-care to avoid compassion fatigue.

Working from home, juggling personal and professional tasks and constantly providing comfort and security to others can be emotionally draining and may result in compassion fatigue. Practice self-care following the principle of "putting one's own oxygen mask first before reaching out to others." Encourage self-awareness and reflection and nurture relationships to maintain work-life balance. Set boundaries and realistic goals. Practice positive coping strategies such as deep breathing, meditating, praying, exercising, enjoying nature, gardening, cleaning, cooking, drawing, listening to music, journaling, playing games, or picking up new skills.

KEY STRATEGY 2

Recalibrate curricular and assessment priorities

Curriculum and instruction leaders should provide clear guidance to schools on the content and implementation of a flexible curriculum. Curricular decisions are based on learner characteristics, context, and needs.

Begin with the learner in mind.

Decisions on calibrating curriculum and assessment priorities depend on a keen understanding of learners and how they learn. Optimizing sustained attention for learning is important, hence, a reasonable and logical combination of technologies and learning modalities are needed. Curriculum leaders as well as school heads are enjoined to heed recommendations on maximum time for student engagement in remote learning which are as follows: Preschool- 60 minutes/day; Kindergarten to Grade 2: 90 minutes/day; Grades 3 to 5 - 120 minutes/day; Grades 6 to 8 - 180 minutes/day; and Grades 9 to 12 - 270 minutes/day. Student engagement can be broken down to 5 to 15-minute long activities depending on their age.

Organize learning competencies beyond traditional courses or subject areas.

During education in emergencies, learners will benefit from a "Less is More" principle in deciding what to include and how to organize the curriculum. Upon the resumption of classes after a disruption, learners need to be provided lessons on understanding the health crisis and the resulting new ways of relating to one another. These will help them regain confidence to navigate change in their daily lives.

The K to 12 curriculum needs to be implemented without departing from the curriculum goal of having holistically developed Filipinos with 21st century skills. To do this, learning competencies that are foundational to this goal should be prioritized and clustered. An overall review of grade level content should yield the ‘big ideas’ to be covered within the school year. These essential understandings serve to anchor the thematic planning of units. Corresponding performance standards across learning areas can be prioritized, therefore allowing lessons to be integrative. Remote learning is not the time to compartmentalize learning into subject areas nor to privilege one subject area over another.

Curriculum and instruction leaders must provide guidelines on designing and organizing thematic units using the ''big ideas'. Integrative lessons embed cross-cutting learning skills (critical thinking, creativity, collaboration, and communication), literacy skills (information, media, and technology), and life

skills (flexibility, leadership, initiative, productivity, and social). Close attention should be given to literacy and numeracy as foundational skills to lifelong learning across grade levels. Finding curriculum connections between and among learning areas, namely, Science, Mathematics, Literature, Social Studies, Values Education, Technology and Livelihood Education, Home Economics (Edukasyong Pantahanan), Physical Education and Health, Music and Art, through integrated thematic units and authentic learning experiences, will heighten student engagement.

Establish a family literacy program.

Family literacy programs and activities will be the bedrock of continuing literacy development and the strengthening of a reading culture among Filipinos. Hence, a literacy education system which is contingent on an active partnership between homes and schools must be put in place. This system should empower parents and other family members as they assume their new roles as literacy partners. It should ensure collaboration and communication between teachers and literacy partners; equity and inclusion by recognizing learner diversity; and access to books and other forms of print and multimedia literacy resources. Adequate funding must be allocated for this literacy education system.

Assess to inform students about their learning.

A focus on grading, ranking, and participation in large-scale assessments during the pandemic may cause more harm than good. Undue stress related to summative assessments may impinge on learners' mental health. Assessment feedback should emphasize and strengthen students' capacity to learn independently and to check their progress using self-assessment activities. Assessment may simply mean asking the students to demonstrate what they know. Authentic products of learning documented in portfolios can be validated using 60-second assessment conversations such as informal chats or casual interviews. Use short conversations to help establish students' understanding of the lesson and to verify if the students actually worked on their projects independently.

Be inclusive.

Remote learning, though challenging, is an opportune time to be truly inclusive and learner-centered in content and approach. Below are some examples of strategies for inclusion.

- ***Use Mother tongue and Filipino Sign Language (FSL), and contextualization.***

  Maximize the use of home language/mother tongue and contextualization as vehicles for learning. Use the extended time at home when learners spend more time with their elders as an opportunity to strengthen their literacy in their mother tongue or the language of learning. COVID-19 related materials written in various Philippine languages can be read together by parents and children. An example is the "Diksyunaryong Pambata" developed by the Reading, Early Grade, Arts, and Language Education Area of UPCEd. The

dictionary consists of four major parts: 1) *Ano ang COVID-19?,* 2) *Paano Maiiwasan ang Pagkalat ng COVID-19?, 3) Ano ang mga Bagong Klasipikasyon ng COVID-19?, and 4) Paano nalalaman kung may COVID-19 ang isang tao?.* The dictionaries, which are in English and Filipino, present COVID 19-related terms in Filipino Sign Language to benefit hearing and deaf users (https://bit.ly/dictionaryforchildren).

● ***Create and implement an individualized education plan for learners with disabilities.***

The Individualized Education Plan (IEP) is a document which identifies targeted learning goals and strategies for the learner with disability. It is a product of educational assessment and collaboration among teachers, parents and medical and allied professionals. Guidance on the education of learners with disabilities in the time of flexible learning options is given in the IEP. Learners, whether they attend graded or non-graded classes, regular/mainstreamed or special education classes, should have an IEP. The disruption of classes and the change in learning milieu, from school to home, necessitates the revisiting of IEP goals, strategies, and evaluation procedures. Schools should monitor the well-being of learners with disabilities and, particularly, the implementation of the IEP.

● ***Collaborate in adopting a transdisciplinary approach to intervention.***

The use of flexible learning options, especially remote learning, demands adopting a transdisciplinary approach to intervention for learners with disabilities. In the transdisciplinary approach, special educators and allied medical professionals share their expertise and intervention strategies, not only with one another but also with parents and learning partners to ensure the continuity of intervention despite lockdowns. With limited mobility and physical distancing, therapy and special education services may not be readily accessible to learners with disabilities. Hence, teach task analysis, social skills development and meltdown management, as well as informal assessment of children's progress, to parents and learning partners. Collaborate with families, specialists and teachers to achieve a successful transition for learners with disabilities.

KEY STRATEGY 3

Enact flexible learning options

At the initial onset of any disruption in education, the primary concern is safety and security. The focus of iInitial lessons should be on helping learners understand the causes and effects of the disruption. However, to mitigate the impact of the COVID-19 pandemic on the learners' education, a serious look at the various ways to deliver education is needed. The emerging consensus is to create flexible learning options.

Flexible learning options are education programs designed for students who are unable to attend school for various reasons. At this time, it must be assumed that learning delivery will no longer revert to pre-pandemic practices. The assumption is that learners will not physically attend schools for prolonged periods of time in order to prevent the spread of COVID-19.

The following strategies describe ways to enact flexibility. Any combination of these strategies can be captured in educational programs to make them responsive to learner needs. However, the development and implementation of flexible learning options should recognize most teachers' lack of experience in remote learning and flexible learning options. Most school teachers are used to synchronous learning which they usually direct. This is the first hurdle to be addressed when transitioning the faculty into handling flexible and remote learning programs for their students.

Create flexible learning options.

DepEd Order 21, s. 2019 defines "instructional flexibility" as adaptations in terms of the time and duration, the place or method of instruction. Available pedagogies and learning resources can be used at the outset. To respond to the times, modify existing flexible learning options developed by DepEd and its partners such as in-school, off-school approaches, the Enhanced Instructional Management by Parents, Community and Teachers (e-IMPACT project), Open High School Programs, Alternative Learning System (ALS), and homeschooling. At the same time, develop new flexible learning options to suit present demands – such as the unprecedented number of students, families and teachers who will migrate from formal education to flexible learning programs. Design instructional frameworks that show how aspects of education delivery will be pliable. These new programs may be developed locally or nationally.

Flexible pedagogies are learner-centered in that they provide contexts where learners dictate the parameters of program design. Flexible learning options must make content available through a variety of methods and devices, so students can choose what is most suitable to their conditions and needs. A number of aspects of instruction and learning delivery can be modified, so that learners can still participate in education in their own terms or based on their personal constraints and contexts. These aspects include:

1. content to be learned,
2. languages of learning,
3. benchmarks, gateways and endpoints of learning units,
4. ways content is delivered,
5. resources available,
6. technologies of choice,
7. learning environment and spaces,
8. times dedicated for learning,
9. duration for which curriculum content and goals are to be achieved,
10. ways to demonstrate learning, and
11. ratings awarded for achievement.

The rule of thumb is: the more aspects are allowed to vary in a given program, the more flexible it is. However, note that it is the realistic and sensible combination of flexibilities which makes learning attainable during an emergency.

Select appropriate learning delivery modalities.

Learning can be delivered using a variety of modalities, namely face-to-face instruction, remote learning, and blended learning, which is a combination of the first two. Remote learning that employs both high (digital) and low (analog) technologies can support education programs in the absence of or in combination with face-to-face interaction.

Combine educational technologies.

Learners have different capacities to stay engaged in lessons. What helps sustain their interest and attention are creative and diversified platforms and strategies. Use a combination of print, broadcast, and digital media with different levels of interactivity to sustain student engagement. It goes without saying that developmentally appropriate principles must guide the selection of these platforms and strategies. Printed media includes learning materials such as textbooks and learners' modules which have been modified for home learning situations. Broadcast media includes radio and television. These are the most widely available technologies across the country. Recruit television and radio stations as learning delivery partners to give students more options on program viewing schedules or transmission quality. Systematic scheduling of programs will ensure that all learners will be able to access programs that correspond to their lessons. Finally, when and where possible, use digital technologies, systems, tools, devices and resources. Data in digital formats can be organized to produce online and offline learning resources that can be used on electronic equipment such as computers and mobile devices. Schools and teachers need to determine the kinds of devices that students can access. Utilize technology and devices that learners already own and use because this assures familiarity and affordability.

Explore varied learning resources.

Learning resources within a study unit should come in varying formats and platforms to enable students to apply their learning in multiple ways. Loan or give a device to learners who do not have devices/equipment of their own. Train students on how to use these devices. Schools and communities can pool resources together to help learners. For example, schools can deliver printed learning materials to learners' homes, while local communities can establish programs such as schools-on-air, so learners who only have low technology devices/equipment can still access educational programs. Ideally the printed materials and broadcasted lessons complement. Should internet access be necessary in learning, provide means to connectivity to ensure that no learner is excluded. However, make sure that guidelines on technology use should be in place to protect learners' safety and well-being.

Providing easy access to learning resources is also important. If necessary, bring reading materials such as newspapers, magazines, trade books to learners through mobile libraries or similar mechanisms such as a library hub. However, take the necessary health precautions to prevent the spread of COVID-19. Another way to simplify access to learning resources is to use information systems already in place such as the curriculum codes which connect materials in the DepEd Commons and the DepEd LR Portal with the curriculum. Many learning areas require the use of laboratory equipment which are not typically available in homes and communities. Give learners access to these equipment, but ensure that sanitation and disinfection, strict rotational schedules, and physical distancing are observed in doing so. Finally, allow students to seek their own references, which is an essential study skill. Depending on age and purpose, give students leeway in finding materials which are related to their lessons or which they want to explore.

Rethink times for learning.

Design learner-centered, flexible learning programs that allow students to choose when to do their learning activities. Design asynchronous lessons which allow students to work on tasks at their own pace. Teachers may specify the time given to complete the tasks, but let students decide when to study. Parents should support learners in managing their time wisely.

A flexible school calendar is most certainly justified during times of educational disruption. Relax time constraints significantly during remote learning to reduce the pressure on students to complete requirements, especially since the academic support they receive from the home and community varies. One option is to allow school calendars to differ for different grade levels. For example, Grade 1 learners could be following a June to March school calendar while grade 12 learners could be following a September to June calendar. Another strategy is to institute year-round learning so learners can take staggered but more frequent breaks from school to decrease the number of students physically attending school at a given time. Make relevant school

policies flexible as well, as these have implications on assessments and grades, as well as teachers' work assignments.

Adopt rotational shifts.

Until such time that a vaccine becomes available, moderate face-to-face instruction with health and sanitation precautions, especially physical distancing. It is recommended that staggered attendance be practiced in any physical classes. Make fewer learners attend school on a given day, so that they can be at least 2 meters away from each other. In weekly shifts, make students attend 2 days of school, then have them do remote learning for the next three days. Some countries have adopted a cycle based on the information about how COVID-19 spreads. Learners go to school for four consecutive days every two weeks. Then, for the next 10 days, they stay home and do remote learning activities.

Provide standards for flexible learning options.

Provide developers and users of flexible learning options with sufficient guidance and standards for each and every program. Keep teachers and learners, the end users of these options fully informed about available programs. Above all, allow teachers time to prepare, learn and transition to implementing flexible learning programs.

KEY STRATEGY 4

Empower families for home-based learning

Parents are primarily the health and safety guardians of their children. They should inform their family about COVID-19 and train them to acquire new habits like regular handwashing, face mask wearing, physical distancing, and proper food handling. Additionally, during prolonged educational disruptions, parents also become the de facto teachers of their children. Whether schools use print, radio, or television or web-based technologies, most distance learning programs depend on parents or caregivers to take the role of tutors, especially for elementary grade students. Their indigenous and personal knowledge can be supported with flexible learning programs, so that their natural capacity to nurture and teach children will result in meaningful and fun learning interactions. The following suggestions aim to help parents fulfill the above responsibilities.

Develop high parental engagement and involvement.

High parental involvement in education reaps positive results for learners. This can be leveraged during quarantine when both parents and children are at home. Teach parents on how to talk to their children. Parents can also be trained on learning facilitation procedures, as well as the content and competencies their children need to learn.

Family or community members may be engaged to teach children in circumstances when parents cannot be fully available to teach their children due to employment, family problems, and other reasons. The school should oversee the availability of a home or community-based learning partner for every student.

Make home-based learning fun for everyone.

Make home-based learning fun and meaningful to learners since they may already be experiencing a high level of anxiety. Facilitate naturalistic informal learning through various activities such as singing and dancing, sharing of stories, playing musical instruments, playing board games, gardening, art projects, and cooking. Use these to develop literacy/numeracy, critical thinking, and problem-solving skills. Teachers and parents can make a list of equivalent informal activities for learning competencies that can be done at home.

Helping parents manage their expectations. This is an important preparation for home-based education. Establish open communication to allow parents to seek assistance from teachers. These prevent parents from feeling frustrated when their children do not perform well or refuse to do school work, which may lead to children being punished. Assure parents that any gaps in their children's learning will be addressed through bridging classes handled by the teacher.

KEY STRATEGY 5

Lead for resilience and innovation

Educational leaders are now, more than ever, at the forefront in addressing a myriad of issues during the COVID-19 pandemic. The current context calls for a social influence process (Yukl, 2006) to achieve a shared purpose among school community members. The following suggestions are intended to help school administrators and teachers in exercising democratic mechanisms when making decisions.

Observe resilience leadership in successfully pursuing educational goals.
Resilience leadership is the ability of educational institutions to move forward in successfully pursuing its goals whilst facing difficulties. Educational leaders can proactively address immediate challenges through School-Based Management (SBM) by developing contextualized measures in response to the pandemic.

Administrators should make quick and sound decisions in setting up requirements needed to facilitate flexible learning. At the same time, they should be constantly available for consultations and collaborations with various organizations to come up with quality decisions (Reimers & Schleicher, 2020). To increase parental engagement, organize training for parents to help them with learning delivery at home.

Mitigate inequitable access to learning delivery modalities and technologies.
Risk management is arriving at decisions while attaining greater outcomes, so that the likelihood of losses and damages are kept at a minimum. Since the planned mode of delivery of learning in the country during the pandemic is multimodal, each method should be suitable to diverse learners with varied access to mass media and technology. Education leaders must consider unique circumstances and requirements, while bearing cost implications in mind.

- **Plan how to respond to the conditions brought about by the pandemic**. Create a team that could plan and communicate the main objectives for this particular situation. As part of the strategy, the plan should be communicated to all stakeholders.

- **Consult with teachers and students on the availability of resources.** Conduct extensive surveys for teachers and students to determine how they access learning resources. Conduct the survey through various modes such as mobile phone short message service (texting), calls, and online applications or social media sites.

- **List school resources.** Based on the surveys conducted, make an inventory of potential school resources that will be used when deciding on the delivery mode of learning. Categorize school resources from simple/low to high technologies. These can be internal resources such as printed materials, computers, laptops, versions of licensed software, photocopying machines, and printers. External resources such as internet connection, television, radio, and other community resources should also be listed.

- **Provide technologies.** Accessibility and inclusivity should be the primary considerations for the technologies that will be used for the school's intended learning delivery. If the mode of learning delivery will include high technology, give a financial support scheme to teachers for the purchase of table-top computers or laptops as well as the chosen software or internet-accessing devices. This will support the technology-intensive learning delivery.

Optimize benefits of technology use.

To steer institutions to adapt to the fast-changing digital world, educational leaders must also be technology leaders. School records such as the Learning Information System (LIS) should be accessible online to allow everyone to retrieve real-time data. Use software applications to monitor the health status of all school members for quick identification of suspected COVID-19 cases. Make the use of full or blended learning, formative assessments such as quizzes, oral exams, creative outputs, and team projects possible using various digital formats. Consider using Open Educational Resources (OER) which are free with an open license. Maintain the integrity of assessments by scheduling online one-on-one face-to-face interaction with the teacher.

KEY STRATEGY 6

Redesign the learning environment

The learning environment is an important consideration in the ERCP. In anticipating the reopening of schools, the learning environment should sufficiently support learning delivery. The following suggestions aim to help in preparing learning environments that will help achieve curriculum goals in times of crisis.

Provide a learning environment that supports flexible learning options.
Since instruction and assessment need to be flexible, the learning environment must be flexible as well. The learning environment may be in the school, at home, or in the community, and it should consider time and space for learning. Provided learning options should appropriately respond to the learners' context.

Infrastructure for modern schools are not only limited to physical spaces but also includes ICT infrastructures that are relevant to support teaching, learning, and administration in schools (PDST Technology in Education, n.d.). The provision of technological infrastructure is crucial for learning continuity and efficiency of services especially during a global health crisis. When implemented properly, technology can boost engagement and produce significant gains in student achievement. However, two important elements should be emphasized to achieve this outcome: 1) The pre-requisites of adequate technological infrastructure, and 2) teachers' competence in utilizing appropriate pedagogical approaches using technology.

However, in the event where schools do not have technological infrastructures, they may utilize flexible, low-technology learning options. For radio/television broadcast, distance learning, and print-based learning, a home environment plays a vital role in the learning processes of students at any level. Parents or guardians of children in basic education play a vital role in preparing a conducive learning space. Parental supervision is crucial in establishing routines for students to finish their learning tasks at home.

For rural and spacious communities, infrastructures can be safe learning spaces for students who do not have access to high-technology. In delivering instruction, schools should work with barangay units that have communication facilities.

Secure technological infrastructure for the well-being of students and teachers.

Technological infrastructure is not merely for the provision of a facility that provides efficient teaching and learning activities. Ensure that these are safe for the students to explore and discover new ideas. Research proves that continuing educational activities can contribute to students' well-being during a crisis, for it maintains "a sense of normalcy and regularity in an otherwise unpredictable situation where the normal functioning of individuals is constrained by the limitations on mobility" (Reimers & Schleicher, 2020, p.8). This can be done by developing clear guidelines on screen time exposure for children while engaging in learning that uses technology. Address the critical question, "When school is online, how much screen time is too much?" (Center on Media and Child Health, 2014). Likewise, protect teachers from the overwhelming use of technology that is prone to crossing the boundaries of home and work. Identify boundary management strategies to prevent teachers' well-being from being negatively affected by work-from-home arrangements (Wepfer, Allen, Brauchli, Jenny, & Bauer, 2017).

Design physical spaces in schools to enforce non-pharmaceutical interventions.

Despite the urgency, health experts and scientists have already stated that it would take years for a vaccine to be developed and at best, it could become available only by mid 2021 (Gallagher, 2020). Hence, for now, non-pharmaceutical interventions are the only means to mitigate the spread of COVID-19 in schools (Reimers & Schleicher, 2020).

When face-to face-classes are already possible, design schools environments that meet proper health protocol requirements such as handwashing facilities with soap and adequate water supply. Physical distancing should also be observed to avoid exposure to corona virus and to slow down local transmission (Centers for Disease Control and Prevention, n.d.). Schools should practice physical distancing by observing the following:

- maintaining a 1-meter radius around each student, resulting in a 2-meter total distance between any two students,
- discouraging student mixing outside the classroom,
- conducting health checks, and
- limiting interactions outside school (Minnesota Department of Health, 2020).

Make small groups use facilities at a given time.

The standard classroom size in the Philippines is 7x9 meters or 63 square meters. With the implementation of physical distancing, a typical class can only accommodate 15 students. Hence, divide the class into small groups, so that students will only attend face-to-face sessions with teachers on schedule, while the remaining days can be spent at home for independent or remote learning. In effect, the student population will be less dense at any given time, so appropriate arrangement of spaces and flow of movement in the school can be done. Users of other spaces such as corridors, canteen, library, laboratories should also observe physical distancing.

KEY STRATEGY 7

Evaluate education financing

Government and public and private school executives need creative means to finance new flexible learning modalities. Acquire financial resources to initiate and account for accessible, and flexible quality learning delivery.

Resolve competing priorities and allocate resources accordingly.

The cost of implementing an array of flexible learning options will vary widely, although full digital learning will likely be the most expensive. Face-to-face learning delivery and the use of analog technologies have infrastructure that are most likely already in place, and so they are not expected to impact heavily on education financing, unlike the new infrastructure required for full online or blended learning modalities. Allocate funds for the purchase of hardware, software, connectivity, ongoing maintenance and technical support including personnel, professional development and training, facilities, locale, and renovation, and project management cost for digital learning environments.

With all these components competing for scarce resources, prioritize government and private school funds for setting up the essential infrastructure for flexible learning modalities. In addition to short term and immediate requirements, strengthen teachers' capacity to enable them to implement remote teaching. Allocate funds for training that will make teachers proficient in both synchronous and asynchronous modes, familiar with learning management systems and online learning activities and materials.

Source funds and recalibrate school operations.

The imminent and inevitable exodus of students from private schools to public schools will undoubtedly challenge the capacity of public school buildings, and the adequacy of qualified and competent teachers and staff. Public schools cannot accommodate all the students who will transfer. There is urgency for the government to mitigate this situation through economic stimulus and tax alleviation measures to keep private schools afloat.

The government must provide students and parents the means to choose between public and private education by expanding the voucher program to all the levels of basic education. Doing so strengthens the complementarity of public and private education in youth development. As a long term solution, the amendment of the Government Assistance to Students and Teachers in Private Education (GASTPE) law should be explored. The scope of overseas development assistance to finance service contracting schemes and the lease of private educational facilities for public school use should be widened. Lastly, tax incentives to private companies that will provide missionary rates for technological infrastructure in schools should be provided.

The following fiscal measures can be explored to strengthen public schools' capacities for flexible learning options. First, Local School Boards (LSB) of public schools should utilize the Special Education Funds for: providing needed devices to teachers and students, installing infrastructure for connectivity, online learning resources development, parent education, and teachers' capacity building for flexible learning options. Second, the benefits of the Adopt-a-School Program of Public Private Partnerships should include civil society organizations. Third, the MOOE (Maintenance and Other Operating Expenses) budget should be realigned to prioritize the cost requirements for flexible learning options. Lastly, the government must exercise its regulatory power over telecommunications companies to boost internet service for online education especially for the under-served regions.

KEY STRATEGY 8

Create new knowledge

Education in emergencies, although rife with challenges, presents opportunities to re-imagine and clarify what truly matters in education. As the present pandemic propels education towards quick reformation, research on these changes must be designed to capture patterns. Qualitative and quantitative studies could determine if implemented changes brought about the desired and relevant learning among students. These could give rise to context-specific models of education during emergencies as well as different types of educational technologies. The following suggestions and questions aim to guide researchers in conducting studies that will help us learn from our chosen courses of action during the pandemic.

Understand how educational technologies reshape education.

"Technologies and human beings are co-determining, co-constructive agents" (Kozintes, 2015) even in the field of education. With our ideas and actions, we choose technologies, we adapt them, and we shape them, just as technologies alter our practices, behaviors, lifestyles and ways of being" (Kozinets 2015, 24). A key question that must be addressed is how educational technologies chosen by particular groups affected by the pandemic redefine and reshape education. Additional questions are: Were the educational goals, programs and objectives revised? Is the education delivered during the COVID-19 pandemic relevant to learners? In what ways did learners contribute to these changes? Was access to quality education ensured during the pandemic?

Explore the social context of technology use in education.

The socio-technical nature of educational technology use (Selwyn, 2010) and the promise of online learning should not obscure the importance of local contexts in the framing of learning processes and practices. The ways of managing and preventing "the exclusionary potentials of networked learning" (Selwyn, 2010), must become a key aspect of research during these times. The following questions will lead to a better understanding of how the new social environment has impacted on education and learners: What were done by educational systems in the field of educational technology to mitigate the effects of social inequities and resource exclusion? In what ways did the learning modalities used change the way students learn? Will digital technology bring about student autonomy and empowerment? How effectively did computer mediated communication deliver content and/or achieve learning objectives? How will the digital environment reshape teachers' achievement of agency? How will the new computer-mediated environment affect pedagogical habits and dispositions? How will the shift impact teachers' enactment of teaching as a bundle of practices?

Synthesis

In times of emergencies such as a pandemic, it is imperative for education to continue and to demonstrate resilience – the ability to overcome adversity. It should be guided by three principles, namely, compassion, inclusion, and innovation. These principles enable an educational institution to prioritize safety, health, and well-being of its stakeholders, harness collaboration, be sensitive to diversities, constraints, and vulnerabilities of stakeholders, and build on the strengths of existing practices, resources, and networks in upholding quality education amidst challenging circumstances.

Strategies for carrying out an Education Resilience and Continuity Plan are the following:

1. Prioritize teacher and student safety, health, and well-being.
    a. Do no harm.
    b. Communicate accurate information for proactive coping.
    c. Integrate standard health protocol in school operations.
    d. Provide psychosocial support.
    e. Practice self-care to avoid compassion fatigue.

2. Recalibrate curricular and assessment priorities.
    a. Begin with the learner in mind.
    b. Organize learning competencies beyond traditional courses or subject areas.
    c. Establish a family literacy program.
    d. Assess to inform students about their learning.
    e. Be inclusive.

3. Enact flexible learning options.
    a. Create flexible learning options.
    b. Select appropriate learning delivery modalities.
    c. Combine educational technologies.
    d. Explore vaired learning resources.
    e. Rethink times for learning.
    f. Adopt rotational shifts.
    g. Provide standards for flexible learning options.

4. Empower families for home-based learning.
    a. Develop high parental engagement and involvement.
    b. Make home-based learning fun for everyone.

5. Lead for resilience and innovation.
    a. Observe resilience leadership in successfully pursuing educational goals.
    b. Mitigate inequitable access to learning delivery modalities and technologies.
    c. Optimize benefits of technology use.

6. Redesign the learning environment.
    a. Provide a learning environment that supports flexible learning options.
    b. Secure technological infrastructure for the well-being of students and teachers.
    c. Design physical spaces in schools to enforce non-pharmaceutical interventions.
    d. Make small groups use facilities at a given time.

7. Evaluate education financing.
    a. Resolve competing priorities and allocate resources accordingly.
    b. Source funds and recalibrate school operations.

8. Create new knowledge.
    a. Understand how educational technologies reshape education.
    b. Explore the social context of technology use in education.

References

Ainsworth, L. (2003). Power Standards: Identifying the standards that matter the most. CO: Advanced Learning Press.

Arzadon, M. (2020). *Empower families, collaborate for home-based learning*. Retrieved from https://education-alternatives.blogspot.com/2020/05/empowering-and-collaborating-with.html

Barreiro, Jr. V. (2017, June 1). *PH has slowest average internet speed in Asia Pacific*. Retrieved on 8th April 2020 from https://www.rappler.com/technology/news/171680-philippines-akamai-broadband-adoption-internet-speed-rankings

Biesta, G. & Tedder, M. (2007). Agency and learning in the life course: Towards an ecological perspective. *Studies in the Education of Adults*, 39, 132–149.

Center on Media and Child Health. (2014). *When school is online, how much screen time is too much?* Retrieved from https://cmch.tv/how-much-screen-time-is-too-much-for-kids-when-it-comes-to-online-learning/

Centers for Disease Control and Prevention (n.d.) *Social distancing.* Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html

Collie, R. J., Bostwick, K. C., & Martin, A. J. (2019). Perceived autonomy support, relatedness with students, and workplace outcomes: An investigation of differences by teacher gender. *Educational Psychology,* 1-20.

Department of Education Order 21, s. 2019. "*Policy Guidelines on the K to 12 Basic Education Program*".

Duffield, S., & O'Hare, D. (2020). Teacher resilience during coronavirus school closures. British Psychological Society: Leicester. Retrieved on 8th April 2020 from www.bps.org.uk/sites/www.bps.org.uk/files/Member%20Networks/Divisions/DECP/Teacher%20resilience%20during%20coronavirus%20school%20closures.pdf

Education Cannot Wait (2020). *COVID-19 and Education in Emergencies.* Retrieved on 12th April 2020 from https://www.educationcannotwait.org/covid-19/

Feldman, J. (2016). Pedagogical Habitus Engagement: Teacher Learning and Adaptation in a Professional Learning Community. *Educational Research for Social Change*, 5(2), 65-80.

Gallagher, J. (2020). *Coronavirus vaccine: When will we have one?* Retrieved from https://www.bbc.com/news/health-51665497

Khidir, S. (2019, September 12). Internet inequality in the Philippines. Retrieved on 8th April 2020 from https://theaseanpost.com/article/internet-inequality-philippines

Kozinets, R. (2015). *Netnography: Redefined* (2nd e). London: Sage Publications Ltd.

Illinois State Board of Education. (2020) Remote Learning Recommendations During COVID-19 Emergency.

Magsambol, B. (2020, April 27). *Over 400, 000 private school employees affected by lockdown -group*. Retrieved on 8th April 2020 from https://www.rappler.com/nation/259204-private-schools-affected-coronavirus-pandemic

Markham, A. (2005). The methods, politics, and ethics of representation in online ethnography. In N. Denzin and Y. Lincoln (eds.), *The Sage handbook of qualitative research* (Vol. 3) (793-820). Thousand Oaks, CA: Sage.

Martin, N. I., Kelly, N., & Terry, P. C. (2018). A framework for self-determination in massive open online courses: Design for autonomy, competence, and relatedness. *Australasian Journal of Educational Technology*, 34(2), 35–55. https://doi.org/10.14742/ajet.3722

Mateo, J. (2019, August 1). 1.8 M pupils undernourished – DepEd. Retrieved on 8th April 2020 from https://www.philstar.com/other-sections/education-and-home/2019/08/01/1939551/18-m-pupils-undernourished-deped

Mercurio, R. (2019, September 13). *Philippines 2nd cheapest mobile data price per GB in AsPac – Globe*. Retrieved on 8th April 2020 from https://www.philstar.com/business/2019/09/13/1951239/philippines-2nd-cheapest-mobile-data-price-gb-aspac-globe

Miller, A. (2018) 3 Tips for Using Conversations for Assessment. Retrieved from edutopia.org.

Minnesota Department of Health (2020). *Guidance for social distancing in youth and student programs.* Retrieved from https://www.health.state.mn.us/diseases/coronavirus/schools/socialdistance.pdf

PDST Technology in Education (n.d.) *Technoogy overviews in school – ICT infrastructure.* Retrieved from https://www.pdsttechnologyineducation.ie/en/Technology/Technology%20Overview/

Philippines, Department of Education. (2017). *Operational guidelines on the implementation of school-based feeding program for school year 2017-2022.* Retrieved on 8 April 2020 from https://www.deped.gov.ph/2017/08/07/do-39-s-2017-operational-guidelines-on-the-implementation-of-school-based-feeding-program-for-school-years-2017-2022/

Reimers, F. M. & Schleicher, A.(2020). *A framework to guide an education response to the COVID-19 Pandemic of 2020.* OECD.

Romero, J. (2019, September 9). *Fewer students to benefit from DepEd subsidy program.* Retrieved on 8th April 2020 from https://news.abs-cbn.com/news/09/02/19/fewer-students-to-benefit-from-deped-subsidy-program

Schulte, B. (2019). Teacher Agency and the Digital: Empowerment or Control? *On Education: Journal for Research and Debate*. Retrieved on 8th April 2020 from

https://www.oneducation.net/no-05_september-2019/teacher-agency-and-the-digital-empowerment-or-control/

Selwyn, N. (2010). The 'new' connectivities of digital education. In M. Apple, S. Ball, and L.A. Gandin (eds), *The Routledge international Handbook of the Sociology of Education* (90-98). London: Routledge.

UNICEF (2020). *Parents and caregivers as partners in learning.* Retrieved from https://drive.google.com/file/d/1RFRbow0o1qrLdwwRqizz7bcsVcy4pYFZ/view

UP College of Education. (2020). *Diksyunaryong Pambata: Paano nalalaman kung may COVID-19 ang isang tao?* Retrieved on 23rd April from https://educ.upd.edu.ph/diksyunaryong-pambata-paano-nalalaman-kung-may-covid-19-ang-isang-tao/

Wepfer, Ariane & Allen, Tammy & Brauchli, Rebecca & Jenny, Gregor & Bauer, Georg. (2017). Work-Life Boundaries and Well-Being: Does Work-to-Life Integration Impair Well-Being through Lack of Recovery?. Journal of Business and Psychology. 10.1007/s10869-017-9520-y.

Yukl, G. (2006). *Leadership in organizations (6th ed.)*. Upper Saddle River, N.J.: Pearson/Prentice-Hall.

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