

GENERAL SHAPING

PAPER



I. RATIONALE

The Enhanced Basic Education Program or K to 12 Basic Education Program is a response to local and global community needs and demands through its mission to strengthen the values of the Filipino people; develop a strong sense of nationalism; develop productive citizens who contribute to the building of a progressive, just, and humane society; ensure environmental sustainability; and cultivate global partnerships for development. The implementation of the K to 12 Basic Education Curriculum is considered one of the most significant educational reforms in the country, introducing several programs and projects that all aim to expand and improve the delivery of the Philippine basic education. Its primary goal is to equip Filipino learners with the necessary skills and competence to prepare them to take on the challenges of the 21st century. It also endeavors to make the basic education system in the Philippines on a par with international standards by ensuring that it is appropriate, responsive, and relevant to the learners and to national and global realities (DepEd, 2019).

As with any curricular reform, however, the K to 12 Program is not without challenges. Results of both national and international standardized assessments reveal no improvement in the academic performance of Filipino learners (Schleicher, 2018; Mullis, Martin, Foy, Kelly, & Fishbein, 2020; UNICEF & SEAMEO, 2020). Moreover, the emergence of copious compelling research on the nature of learners and the process of learning emphasizes the need for basic education institutions to keep abreast of global future trends while addressing the changing needs and learning challenges of children (Jorgenson, 2006). These, in turn, prompted a reexamination and enhancement of the K to 12 curricula in order to identify points for improvement to ultimately lift the quality of basic education. The Department of Education, with the Assessment Curriculum and Technology Research Centre (ACTRC), has undertaken the process of reviewing the intended curriculum in order to verify claims about and solve existing gaps in the document. As a result, the Shape of the MATATAG Curriculum is therefore crafted to communicate the process behind the curriculum review and revision, and more importantly, set the future direction and provide a basis for developing the shaping papers for each learning area.

II. BACKGROUND

In pursuing any form of change in the basic education curriculum, it is imperative to understand the current context and setting. Doing so will allow the Department to recognize the existing and expected realities and, consequently, adopt appropriate measures to realize its vision, hence making the MATATAG Curriculum responsive and attuned to the dynamic changes that come into play in the society.

MATATAG: Bansang Makabata, Batang Makabansa

The education agenda of the current administration is known as **MATATAG: Bansang Makabata, Batang Makabansa,** which sets the new direction of the agency and stakeholders in resolving basic education challenges.

The **MATATAG** Agenda has four critical components:





- MAke the curriculum relevant to produce competent and job-ready, active, and responsible citizens;
- **TA**ke steps to accelerate delivery of basic education facilities and services;
- **TA**ke good care of learners by promoting learner well-being, inclusive education, and a positive learning environment; and
- **G**ive support to teachers to teach better.

Specific direction of the Department also includes improving the curriculum by focusing on foundational skills and embedding peace competencies, building more resilient schools and classrooms, strengthening inclusive education programs, advocating for teachers' additional benefits, and providing professional development programs, among others.

The **MATATAG** agenda in improving access, equity, resiliency, and well-being can be attained through the support of the various education stakeholders. This is why education partners penned their commitments and support for the new basic education agenda.

The Demands of the Future in an Ever-Changing World

Living in the 21st century means constant adjustment to rapidly changing environments, which is necessary to navigate multifaceted challenges. In such a context, learners grapple with a deluge of information resulting from technological progress and digitization. This information overload necessitates the development of strong information literacy skills to discern what is crucial, credible, and useful. Additionally, although the surge in digital technology presents an array of opportunities for innovative and personalized learning experiences, these changes also impose a constant requirement for learners to update their digital skills, address issues such as online privacy and cyberbullying, and balance digital engagement with other life facets.

The changing landscape also transforms the job market, creating a growing demand for 21st century skills such as creativity, critical thinking, collaboration, and emotional and digital intelligence. As learners become more globally connected, they develop cultural awareness and global citizenship skills but also face exposure to international crises, contributing to potential anxiety. In the face of these shifts and uncertainties, the necessity for lifelong learning, resilience, and mental strength becomes more pronounced. The evolving world, therefore, presents a complex mix of opportunities and challenges for learners, underlining the crucial role of education systems in fostering supportive, adaptive learning environments.

Therefore, an improved curriculum serves as an essential instrument for preparing students to face future challenges by ensuring relevance through the integration of contemporary topics and the cultivation of critical 21st century skills like critical thinking and digital literacy, and fosters flexibility and adaptability. Moreover, it enhances inclusivity by teaching learners about global citizenship and diversity, while promoting a future-oriented mindset, thereby equipping them not just to adapt to change, but to anticipate and shape it. In sum, an improved curriculum empowers learners to keep pace with change and prepare to become the leaders of tomorrow.



On the Quality of Student Learning: Indicators and Results

To ensure the positive impact of educational reforms, clear baseline data and parameters should guide the Department. These will serve as a reference point to indicate the attainment of educational goals. The results of both national and international large-scale assessments are worth reflecting on as part of the indicators of the current state of basic education though it should be noted that these do not represent the entire basic education system. Among the other triggers of the review and recalibration of the curriculum is the student learning assessment data. It is part and parcel of the planning, monitoring, and evaluation cycles of any educational program. The K to 12 Basic Education system is gauged through both national and international assessments, as provided for by DepEd Order No. 55, s. 2016 and amended by DepEd Order No. 27, s. 2017. These system assessments are designed to provide baselines for the implementation of the curriculum as well as to generate relevant data that will aid in the formulation of policies, programs, plans, and interventions at various level of education governance.

System assessments are given at the end of each key stage. Learners at the end of Grade 3 take the Early Language, Literacy, and Numeracy Assessment (ELLNA), which measures early language literacy and numeracy. Exit assessments in the form of National Assessment Test (NAT) are given at the end of Grades 6, 10, and 12. Both the ELLNA and NAT are designed to determine if the learners meet the learning standards at the end of each key stage and to provide empirical data in the crafting and designing of policies and programs. Results of the ELLNA given in S.Y. 2016-2017 showed many issues and concerns that the Department needs to address in English, Filipino, Mother Tongue, and Math. The results imply the need for more improvements in curriculum and delivery. In particular, strategic interventions should come into play since literacy is an accurate predictor of academic success. Furthermore, the NAT results for English and Math in the last four academic years given to Grades 6 and 9 students affirm the need to have a collective and deliberate effort to address systemic issues that affect the learners' mastery of competencies.

To determine if learners are meeting the learning standards; to help provide information to improve instructional practices; to assess and evaluate the effectiveness and efficiency of education service delivery using learning outcomes as indicators; and to provide empirical information as bases for curriculum, learning delivery assessment, policy reviews, and policy formulation, the first Basic Education Exit Assessment (BEEA) was conducted for SY 2018-2019. Results revealed that SHS graduates of the said school year are in the low proficient level as indicated by the MPS of three 21st century skills: Problem Solving Skills with 36.18, Information Literacy Skills with 34.23, and Critical Thinking Skills with 33.38, respectively. This calls for a strengthened framework on the integration of 21st century skills in both curriculum and pedagogy, which is accordingly one of the enhancements in the 2022 curriculum.

The results of local large-scale assessments are parallel with the World Bank's Philippine Report on the 2018 Programme for International Student Assessment or PISA, which claimed that a significant positive correlation is observed between the regional PISA reading scores and NAT English scores and weak correlations are found



for Math and Science. Other international large-scale assessments (ILSAs) echo the results of the PISA as Filipino participants also fared poorly in the 2019 TIMMS or Trends in International Mathematics and Science Study and the 2019 Southeast Asia Primary Learning Metrics or SEA-PLM. This again points to the need to revisit the existing curriculum, particularly to ensure that curriculum standards are benchmarked against international counterparts and that learning competencies tested in the ILSAs are thoroughly developed in the curriculum and delivered in the classroom.

In light of these assessment data and along with the idea that the success of the curriculum lies in the quality of student learning, the Department expresses its intensified focus on the role of assessment as a source of important feedback on the implemented curriculum and the intended curriculum.

Curriculum Review as Basis for the K to 10 Curriculum Recalibration

Guided by the goals and standards of the K to 12 Program and recognizing the need to ensure that these are attained by the learners, the Department of Education initiated the curriculum review. The review is a quality control mechanism that primarily examines the curriculum in its various phases, i.e., intended, implemented, assessed, and achieved. It is not simply meant to fulfill one of the provisions of Republic Act (RA) 105333 or the Enhanced Basic Education Act to review the curriculum, but is also part of the Department's commitment to ensure quality, relevant, and liberating basic education for all through continuous curriculum refinement.

The Department, through the Bureau of Curriculum Development-Curriculum Standards Development Division, in collaboration with the ACTRC, started the review of the intended curriculum. The review focused on the articulation of learning competencies within and across learning areas to identify gaps, issues, and concerns relative to the standards.

Significant findings reveal that the current curriculum has a substantial number of essential learning competencies, indicating curriculum relevance. While a significant number of prerequisites are explicitly articulated, others were implicit or misplaced, and thus, needed to be addressed. Corollary to the said findings are recommendations to further decongest the curriculum by reducing the number of desirable learning competencies per quarter to provide instructional space for implementers, revisit the sequence of the learning competencies within and across the content domains of the curriculum to ensure continuity and progression of skills, ensure articulation of competencies across quarters and grade levels through prerequisites, and ensure interconnection of learning competencies with the rest of the disciplines.

On the other hand, the review of the implemented curriculum explored factors that help and/or hinder teachers in implementing the curriculum, providing insights into what is working well, what could be further strengthened, and where problems exist, allowing for these to be addressed.





Results show that only a few teachers reported having adequate time to teach all learning competencies. The percentage varies by learning area, grade level, and quarter, but typically fewer than 20% of teachers reported having adequate time to teach all the learning competencies assigned to a quarter. Surprisingly, in some learning areas, almost half of the teachers did not have sufficient time to teach even half the number of learning competencies. This supports the recommendation in the review of the intended curriculum that the number of learning competencies be reconsidered in order to ensure that all learning competencies can be taught with the required cognitive depth in the time available in schools.

Moreover, many teachers identified a mismatch between the prerequisite skills and knowledge assumed by the learning competencies within the curriculum, and the current skills and knowledge of the students who were expected to learn them. Though the responses varied among learning areas, on average 25% of teachers responded negatively, indicating that their classes collectively are not prepared for the learning competency. A few learning areas, grades, and quarters received a consistently positive pattern of responses. Again, this gives credence to the recommendation of the previous review, which suggests articulating competencies across quarters and grade levels through well-defined prerequisites and ascertaining their interconnections. The study highly recommends reducing the amount of learning required by the intended curriculum to ensure that all learning competencies are taught with the required cognitive depth in the time available, and to revise the sequencing, clarity of expression, cognitive demand of the learning competencies, and associated grade level standards, thus allowing prerequisite skills and knowledge to be built systematically from one grade level to the next.

Finally, the review of the tested curriculum explored the extent to which the national tests assess the intended curriculum, with a focus on students in Grade 3, Grade 6, Grade 10, and Senior High School (SHS). The review showed that the national test items are aligned with the content of the intended curriculum, suggesting that the tests fairly assess the intended curriculum and can provide an indication of the extent to which learners have reached the expected standards. Comparison of cognitive demand indicates that the cognitive demand of test items, while aligned to the current wording of the learning competencies in the K to 12 Curriculum documents, is too high. The review also notes the dual mapping of the tables of specifications for the Grade 6 and Grade 10 National Achievement Test (NAT) and the Basic Education Exit Assessment (BEEA) to two different working frameworks: one originating from BEA and the other from BCD. This is problematic as it sends inconsistent messages to stakeholders. Incorporating both frameworks into the curriculum guides would send a more consistent message, especially to schools implementing the curriculum and to those using the results of the national curriculum testing to make inferences about the quality of learning of students.

These findings and recommendations provide significant inputs and directions worth prioritizing as the bureaus in the Curriculum and Teaching Strand engage the Department and relevant stakeholders in the recalibration of the K to 12 Curriculum.





III. THE MATATAG CURRICULUM GOALS

The vision of the DepEd along with the goals and features of its K to 12 Program is realized through its curriculum, which is standards-based in nature. It identifies a predetermined set of learning outcomes that students are expected to master after a certain period of time (UNESCO, n.d.). Learning standards are classified into content and performance standards. Content standards "identify and set the essential knowledge and understanding that should be learned," while performance standards "describe the abilities and skills that learners are expected to demonstrate in relation to the content standards (DepEd, 2015)." Collectively, the K to 12 Curriculum Standards ensure that mastery of concepts and skills is attained, lifelong learning is developed, and graduates are prepared for any of the four curriculum exits: tertiary education, middle-level skills development, employment, and entrepreneurship (DepEd, 2019). The table below reiterates the existing learning areas and introduces their new curriculum goals:

TABLE 1The MATATAG Curriculum Goals

LEARNING AREA	CURRICULUM GOALS
Kindergarten	The redesigned Kindergarten curriculum aims to produce active young Filipino learners who are holistically developed and equipped with 21st century skills.
Filipino	Tunguhin ng Filipino na malinang sa mga mag-aaral ang kasanayan sa literasi, kakayahang komunikatibo, mapanuring pag-unawa sa iba't ibang uri ng teksto, at pagbuo ng multimodal na may lubos na pagpapahalaga sa wikang Filipino at ibang wika sa bansa, kultura, at mga teksto o mga babasahin na magiging daan sa kanyang pagkatuto at paglinang ng ika-21 siglong kasanayan para sa kapakipakinabang na pagganap bilang makabansa at global na mamamayan.
English	Learners demonstrate proficiency in using English in multiple modes to communicate effectively in a wide range of situations, with diverse audiences, and in various contexts. They use their language skills to facilitate and enhance learning across different content areas. They critically analyze, appreciate, and respond to a wide array of literary and informational texts, utilizing these resources to broaden their understanding, perspectives, and creativity. Learners also actively engage in activities and discussions that encourage a deep appreciation and understanding of their cultural heritage, instilling a sense of pride and identity that fosters cultural literacy and promote mutual respect and



	understanding in diverse social and educational
	environments.
Language	Learners demonstrate oracy in L1; use oral and visual language in interacting with others, developing and expressing ideas; engage with and respond to various texts based on real-life experiences; use high frequency and content-specific words; and understand how languages and culture are related.
Reading and Literacy	Learners demonstrate basic literacy in their first language; decode high frequency and basic content-specific words to develop language for learning; understand how words are used in simple sentences to get and express meaning; and comprehend, respond to, and create narrative and informational texts based on real-life experiences.
Good Manners and Right Conduct (GMRC)/ Values Education (VE)	The Good Manners and Right Conduct/Values Education subject aims to produce Filipino youth who decide with responsibility and accountability, act with right conduct and the inclination to do good, and live their daily lives with love for God, people, environment, country, and the world, habitually mindful of the common good.
Mathematics	The main goal of the curriculum is for Filipino learners to become mathematically proficient and critical problem solvers.
	The curriculum intends to develop among the learners the proficiency in solving mathematical problems critically, grounded on a strong conceptual knowledge, strategic use of mathematical skills and processes, desirable values and a proper disposition in mathematics, thus enabling them to become productive and successful 21st century citizens.
Science	The overall goal of the Science Curriculum is the achievement of scientific, environmental and technology and engineering literacy of all learners.
	On achieving the outcomes of the curriculum, learners will be ready to actively participate in local, national, and global contexts and make meaningful contributions to a dynamic and culturally diverse and expanding world. By successfully completing the Science Curriculum, Filipino learners will demonstrate capabilities as put forth in the Basic Education Development Plan (BEDP) 2030.
Araling Panlipunan	Araling Panlipunan is a distinct learning area in the K to 12 Curriculum which intends to develop among Filipino learners



	the socio-civic competencies i.e. cultural tolerance, respect for diversity, upholding human dignity and rights among others which are significant in developing patriotic, nationalistic, and global-oriented Filipinos who are capable and committed in serving the nation. It likewise seeks to engender among Filipino learners critical understanding on historical, geographical, socio-political, and economic issues of the Philippines, taking into account the international and global contexts, allowing them to become productive citizens of the country and of the world.
Makabansa	Ang Makabansa ay isang transdisiplinaryong kurikulum na naglalayong makahubog ng isang aktibong mag-aaral sa pamamagitan ng paglinang ng mahahalagang kasanayang hango sa Malalim na Kaisipan (Big Ideas) ng Sibika, Sining at Kultura, Kasaysayan, at Kagalingang Pangkalusugan na nagpapamalas ng pagkakakilanlan, pagkamalikhain, pagkamalusog at pakikipag-ugnayan sa kapwa at sa iba pang aspekto ng lipunan tungo sa pagiging holistikong Pilipinong taglay ang ika-21 siglong kasanayan.
Edukasyong Pantahanan at Pangkabuhayan (EPP)/ Technology and Livelihood Education (TLE)	The rationalized EPP/ TLE/ TVL envisions learners to apply life skills that are adaptable in their family/community, become ready for the world of work, engage in entrepreneurial activities and improve their livelihood, generate a business relative to their chosen field of specialization, and further explore higher education.
Music, Arts, Physical Education and Health (MAPEH)	The recalibrated Music and Arts Education curriculum aims to develop the learners' multicultural literacy, artistic and creative expression, and holistic national identity as Filipinos through engaging in, creating, and producing different art forms and creative and innovative expressions.
	The recalibrated Physical Education and Health curriculum is geared towards the development and attainment of physical and health literacy as well as 21st century skills that contribute to the well-being of the individual, family, and community, improve the quality of life in society, and motivate the learners to take responsibility for their lifelong holistic health and well-being in a varied and rapidly changing society.

These curriculum goals will be unpacked through the learning area shaping papers and subsequent curriculum guides. It is expected that these documents will detail the standards for learners and the learning competencies they will develop. These will include the specification of knowledge, understandings, skills, and attitudes.



IV. THE FEATURES OF THE MATATAG CURRICULUM

In light of what has been established by the K to 12 Curriculum Review and other pertinent research on the current status of education both in the Philippines and abroad, the DepEd reinforces the strengths of the K to 12 Program by putting forth the suggested features of the MATATAG Curriculum.

Focus on Foundational Skills

The major concern was the congestion of the curriculum, which necessitated streamlining its intent and content. The MATATAG curriculum for Grade 1 has shifted from offering seven learning areas to only five that focus on strengthening literacy and numeracy. New learning areas-Language, Reading and Literacy, and Makabansa—are introduced. These learning areas have been deliberately crafted, rather than simply merging or integrating the existing learning areas.

Language

The Language learning area is a new addition to the existing learning areas for Grade 1 in the MATATAG Curriculum. The creation of the Language curriculum gives more emphasis to the development of oral language skills for communication in the learner's first language, which is essential in developing foundational skills for literacy and learning other content areas.

The development of the Languages curricula recognizes the role of the first language (L1) as the language and literacy resource that the child can use most effectively to establish a strong foundation for literacy development and further knowledge. It recognizes the status of the more than 180 languages in the country, including sign and visual languages and languages of indigenous groups and communities.

Reading and Literacy

The Reading and Literacy learning area aims to develop foundational reading skills essential for early literacy. These goals include building phonemic awareness, decoding skills, and recognizing sight words to facilitate fluent reading in the first language. Comprehension strategies are introduced to help students understand and engage with texts, identify main ideas, and draw simple inferences. Concurrently, the curriculum aims to foster a positive reading attitude, nurturing a love for reading through exposure to age-appropriate and engaging texts.

Makabansa

The introduction of a new learning area called Makabansa in Key Stage 1 (Grades 1-3) intends to provide learners with essential knowledge, skills, and attitudes enabling them to develop personal and cultural consciousness in becoming active, healthy and creative members of their respective communities.





It employs a transdisciplinary approach in actualizing the learning intent and content relative to civics, history, art and culture, and health and wellness optimizing integrative learning frameworks, pedagogies, and approaches.

Ultimately, Makabansa prepares learners to better understand and appreciate the more disciplinal approach of Music and Arts, Physical Education and Health, and Araling Panlipunan as learners go through the succeeding key stages.

Strengthened Literacy and Numeracy in the First Key Stage through the National Reading Program and the National Mathematics Program

Reading literacy and numeracy are essential for success in both academic and professional settings. Sadly, Filipino learners do not exhibit the proficiency expected from their respective grade levels as evidenced by both national and international large-scale assessments. In the most recent PISA assessment conducted in 2018, the Philippines ranked 78th out of 79 participating countries and economies in reading and 77th in mathematics. The results showed that the average reading scores of Filipino learners were significantly lower than the average scores of learners from other countries. Similarly, in the 2019 SEA-PLM assessment, the Philippines ranked 7th out of 7 participating countries in both mathematics and reading, with a mean score of 312 in reading. The low performance of Filipino learners in these large-scale assessments suggests that many learners are not developing the necessary literacy and numeracy skills to succeed in school and in their future careers and that there is a need for the country, through the Department of Education, to improve the quality of the reading and numeracy curriculum and its delivery.

In the first key stage, the curriculum was designed to ensure that literacy and numeracy are at the center of the teaching and learning experience. Literacy abilities are developed through standards that give prime attention to phonological awareness, phonics and word study, vocabulary and word knowledge, grammar awareness and grammatical structures, comprehension, and fluency. On the other hand, children become numerate as they explore mathematical ideas and engage in problem-solving. Children develop confidence as their parents, careers, families and friends help them to mathematically investigate space, structures and patterns, number, measurement, and different kinds of data and connections (South Australia Department for Education, 2021). In their foundational years, it is imperative that children achieve mastery of the foundational competencies required for reading literacy and numeracy, which, in turn, serve as the fundamental skills for success in life.

In addition to the development of a curriculum that centers on reading literacy and numeracy formation, national programs on different literacies shall be implemented in the same school year.

The National Reading Program

The National Reading Program (NRP) is a comprehensive program that aims to make every Filipino learner literate. Achieving this goal calls for a relevant curriculum, adequate resources, appropriate delivery, and through assessment, and well-trained





teachers, instructional leaders with well-in-place support mechanisms. To determine whether goals are realized, monitoring, evaluation, and research must be in place.

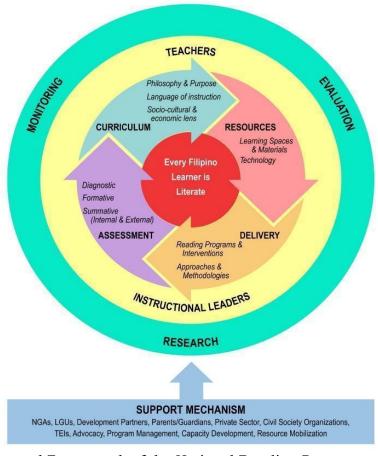


Figure 1. Conceptual Framework of the National Reading Program

The NRP is grounded on the Science of Reading and evidence-based instruction. It stresses the importance of addressing the learners' needs through the implementation of responsive reading programs, interventions, approaches, methodologies, and techniques, which, in turn, aided by developmentally and grade level-appropriate learning resources and technology. Thus, the conduct of assessment for learning must provide data for instructional leaders and teachers for informed decision-making.

The seamless interfacing with teachers and instructional leaders creates a culture of responsive and nurturing feedback mechanisms. Frequent in- and on-time monitoring and evaluation provide data-based policy and program review, thus ensuring continuous improvement.

The sustainability of a quality National Reading Program requires a meaningful and strong support mechanism from the National Government Agencies, Local Government Units, Development Partners, Parents/Guardians, Private Sector, Civil Society Organizations, Teacher Education Institutions, and other education



stakeholders. This collaboration ensures that every Filipino learner is literate and productive member of society.

A policy for the NRP shall be released in a separate issuance.

The National Mathematics Program

Planning for the design, implementation and evaluation of the National Mathematics Program shall be guided by the MOSAIC Framework (Evans et al., 2019), an evidence-based tool of six interrelated pedagogy and learning-focused components that support large-scale and comprehensive literacy and numeracy initiatives.



Figure 2. Programming Framework of the National Mathematics Program (NMP)

In this model, each component is described as follows:

Enabling Policies and Standards

This covers curricular content and pacing, and policies related to: a) language of instruction, b) instructional time, c) teacher certification, promotion, accountability and deployment, d) student evaluation and grade-to-grade promotion, including the establishment of clear grade-specific performance standards and benchmarks, e) teacher incentives and accountability, and 6) the sustainability of educational resources.

• High-Quality Texts and Materials

This covers the print materials and other instructional aids required for high-quality literacy and numeracy instruction. This includes guiding information for teachers on how and what to teach, and when (teacher guides) and instructional material for learners (basic reading primers and mathematics books, as well as supplementary material, including numeracy manipulatives.



• Effective Teachers and School Leaders

This addresses the inputs and resources needed to ensure that teachers know how to use evidence-based literacy and numeracy instructional materials, and that school leaders know how to structure and manage classrooms and schools to improve learning results.

Effective Teacher Coaching and Mentoring

This addresses the need for ongoing, in-school and in-class support - after training - to help teachers implement the instructional practices and models presented during training and use instructional materials effectively.

Continuous Assessments to Inform Instruction

This addresses the need for teachers to have the ability to gather informal and formal data on learner progress and performance, within the context of the classroom, on a regular basis. This type of assessment should be used primarily for immediate response to student learning needs, including whole group reteaching of concepts and skills, small group remediation, and individual intervention for learners with the greatest needs.

Regular Practice Outside of School

This addresses the need to extend learning beyond the confines of the school day. The more time children engage in rich and cognitively challenging literacy and numeracy activities, the greater their learning gains.

A policy for the NMP shall be released in a separate issuance.

Redefining the Interplay among Languages in the MTB-MLE Program

The Mother Tongue-Based Multilingual Education (MTB-MLE) is an integral feature of the K to 12 Basic Education Program, which emphasizes the role of a child's first language as a critical resource for effective learning and foundational literacy development. The program acknowledges that a learner's language, societal and cultural experiences, prior education, media exposure, and home environment form a collective schema facilitating the understanding of new concepts. MTB-MLE advocates the use of the mother tongue as the initial language and literacy resource before transitioning to the learning of other languages. This is made apparent in the revised language curricula through the Language Framework below:



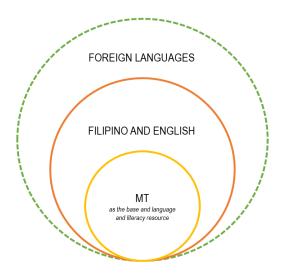


Figure 3. The Language Framework as Introduced in the K to 12 Curriculum

The process of learning multiple languages or the multilingual nature of learning is both simple and complex. It is simple in the sense that to support literacy and language development in an additional language, if there is an understanding of comparable skills across the languages, then teachers and students can make connections between the respective languages, and in the ways in which language is used to make meaning in different contexts, in different forms and for different audiences. Plurilingual awareness and translanguaging support learners to make meaning and acquire both the target language and content knowledge. However, and at the same time, it is important to note that learning an additional language is not a matter of the straightforward transfer of cognitive/academic or literacy-related proficiency and linguistic and cultural understandings. Learning an additional language to manage academic learning is complicated and takes considerable time. An awareness and understanding of similarities and differences in underlying attributes, however, enables students to use and expand their 'funds of knowledge' as they learn to read, write, speak, and listen in one or more languages. Multilingual learning involves both building on what has previously been learned in one language as a foundation for learning in another language, and then using that learning to further extend learning in the original language. This complex process is encapsulated by the internally tangent circles in the figure above as they show that one language (in the smaller circle) or the combination of both (involving the Mother Tongue as a language and literacy resource) may serve as the foundation of learning another (in the bigger circle).

The language framework espouses a mother tongue-based compound-coordinate multilingualism design, which aims for a type of multilingualism in which an individual is proficient in two or more languages, in this case Filipino and English, and can seamlessly switch between the languages in various contexts. The design recognizes that an individual may have one or more native languages or mother tongues and has achieved oral language proficiency in this language. This then becomes the foundation to literacy development in target languages. Mother tongue-based compound-coordinate multilingualism is considered a high level of language



proficiency that can be achieved through extensive exposure to and use of multiple languages (oral language in the mother tongue and literacy in Filipino and English) from an early age specifically in Key Stage 1.

Concomitant with the development of language proficiency, MTB-MLE also aims for cognitive and academic development that prepares learners to develop content knowledge and competencies in other learning areas or subjects. The multilingual curricula, through multilingual instruction, develop, expand, and consolidate learners' language, literacy, and academic proficiency in their L1, Filipino, and English and contribute to the development of plurilingual awareness. Plurilingualism enables the learner to draw on and integrate their knowledge of multiple languages which contribute to life-long learning through language.

Medium of Teaching and Learning

Mother Tongue as Medium of Teaching and Learning (MOTL) refers to the use of the learner's first language in the teaching and learning process. In Key Stage 1, while learners are still developing both oral and written proficiency in the second language(s) (i.e., Filipino and/or English), MT is used as MOTL to support the acquisition of those languages. The first language refers to the language that learners could understand primarily through listening (listening capacity) and/or active use in daily oral communications; hence, it is considered as a primary tool or language and literacy resource in the teaching and learning process. The current policy is to use the Mother Tongue as the primary MOTL for the first four years of education (Kindergarten to Grade 3); Filipino and English are then adopted as the primary MOTL from Grade 4 onwards. However, the Mother Tongue is not terminated at the end of Grade 3 and instead assumes the role of auxiliary MOTL in the second and third key stages.

TABLE 2The MOTL Continuum

MOTI	K	EY S'	rage	1	KEY STAGE 2			KEY STAGE 3			
MOTL	K	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
MT/L1											
Filipino											
English											

^{*}Color gradience refers to frequency of use.

The table above presents the MOTL continuum of MTB-MLE. During the first key stage, the first language (L1) or mother tongue remains to be used as the primary medium of teaching and learning. However, Filipino and English shall gradually be introduced as MOTL in these respective learning areas (i.e., the Filipino subject may be taught in Filipino; the English subject may be taught in English) in Grade 2, with MT simultaneously used as MOTL. Concurrently, Filipino and English are recognized



as possible resource languages for cognitive development in non-language learning areas (e.g., Math, Science, Social Studies, etc.). High frequency words, content-specific words, and predominant text structures in these content areas are captured in the language curricula, thus reiterating that translation of concepts is not advised unless it aids in content knowledge acquisition. It is also worth reiterating that the revised language framework advocates the use of translanguaging in the delivery of the new languages curricula; therefore, any and all languages deemed necessary for the acquisition of content knowledge and language skills may be used in the classroom.

Oracy and literacy skills (i.e., concepts acquired prior to formal schooling) in MT shall serve as basis for transitioning and bridging to Filipino and English, which may be done as early as Grade 1 until the end of Grade 3. Transitioning refers to the transfer of previously acquired concepts in the first language or the Mother Tongue during the process of learning another (i.e., focus on similarities in concepts). Bridging, on the other hand, refers to the transfer of language skills by building on what learners already know about their MT to develop proficiency in other languages (i.e., focus on differences or uniqueness in language). Both are done to prepare learners for the use of Filipino and English as primary MOTL in the second key stage with MT as auxiliary MOTL.

Language Learning Areas

The revised language curricula also present a reorganization of the continuum for the Language Arts. All language learning areas – Language, Reading and Literacy, Filipino, and English – shall develop first the learners' oracy, which shall then serve as the foundation for literacy development in the target languages.

TABLE 3The Language Arts Continuum

KEY STAGE			E 1			KEY STAGE 2		KEY STAGE 3					
LEARNING AREA	G1		G	G	G	G	G	G	G	G	G		
	Q1	Q2	Q3	Q4	2	3	4	5	6	7	8	9	1 0
Language Reading & Literacy													
Filipino													
English								·	·				



LEGEND:

oracy for literacy

basic literacy applied and critical literacy and communicative competence

multiliteracies, communicative competence, and text analysis, evaluation, and production

Language and Reading and Literacy shall be offered starting Grade 1 and shall primarily develop the learners' oracy and literacy. They shall serve as the basis in transitioning the learners' oracy for literacy to Filipino and English. Oracy for literacy is the ability to use relevant oral language elements like phonological awareness, vocabulary, and listening capacity to develop basic or beginning literacy. Basic literacy or the skills used for the initial learning of reading and writing is developed from the third to the fourth quarters of Grade 1.

Filipino and English shall be offered simultaneously starting in Grade 2 and shall primarily develop learners' literacy. The curricula for both languages shall be MT-based as oracy and literacy skills in the first language serve as the foundation in transitioning learners' oracy for literacy to Filipino and English. Basic literacy shall be developed in both languages until Grade 3.

Filipino and English shall continue developing and enhancing learners' communicative competence and applied and critical literacy skills from Grade 4 to Grade 6. Applied literacy is the ability to think about particular ways of doing reading and writing with the purpose of achieving communicative goals in a socially appropriate manner, while critical literacy is a critical thinking skill that involves the questioning and examination of ideas, and the skills to synthesize, analyze, interpret, evaluate, and respond to texts; it is the ability to evaluate the veracity of information and make connections and judgments of the relevance of information.

Finally, by the third key stage, both learning areas shall contribute to the development of learners' communicative competence and multiliteracies or the ability to understand information and the design of meaning through the manipulation of individual modes: linguistic meaning, visual meaning, audio meaning, gestural, tactile, and spatial meaning.

Decongested Curriculum

One of the salient findings of the review is the congestion of the curricula, which has been found to be overcrowded with content, thus disallowing learners to fully grasp and understand various concepts.

To address this issue, the current curriculum is decongested by 70% while still ensuring that the heavier weight of the learning areas would be on English, Filipino, Science, Mathematics, and EPP/TLE or Technical Livelihood Education.

The act of decongesting the curriculum, reducing overcrowding, and focusing on the essential elements of learning has profound implications for learners' educational experiences. First, this approach now provides learners with the time needed to truly





understand and assimilate the foundational elements of learning, rather than simply dabbling in a vast array of topics. Second, a less crowded curriculum allows learners to focus more intently on each learning area, leading to a deeper comprehension and retention of knowledge. Ultimately, the net effect of this transformation is a more targeted, effective, and meaningful learning experience.

Clearer Articulation of the DepEd's 21st Century Skills Framework: Embodying the Vision for the Filipino Learner

The vision of the DepEd remains the same: to produce holistically developed Filipino learners with 21st century skills or the knowledge, skills, attitudes, and competencies that learners need to develop so that they can prepare for and succeed in work and life in the 21st century (DepEd Order No. 21, s. 2019). The improved 21st century skills framework integrates skill sets culled from various international and local competency frameworks that redefine the future of education, skills development, and training in light of the evolving society and economy. The development of such skills coupled with the Department's core values (i.e., Maka-Diyos, Makatao, Makakalikasan, Makabansa) will allow learners to realize aspirations that represent their ideals and ambitions, and ultimately contribute to building a progressive and cohesive nation that enjoys economic prosperity, socio-political stability, unity in diversity, and sustainability.

DepEd's 21st century skills framework shall also serve to guide and ensure the inclusion of these skills across all governance levels of DepEd. The detailed framework specifies terminology and descriptions of these skills to be used, thus promoting a shared vocabulary to support clear and consistent communication and implementation. Most importantly, the framework shall guide all governance levels of DepEd as they work together to enhance the development of these 21st century skills by all Filipino learners.

The detailed 21st century skills framework comprises the same four domains as originally set out in DepEd Order No. 21, s. 2019. These are:

- Information, Media, and Technology Skills
- Learning and Innovation Skills
- Communication Skills
- Life and Career Skills

The framework also provides a definitive description of the skills, competencies, values, and attributes that learners are expected to develop within each domain. It is expected that throughout their education, Filipino learners would develop these 21st century skills, in addition to foundational literacy and numeracy skills, and discipline-specific skills/competencies (e.g., scientific literacy). Together, the 21st century skills, foundational skills and discipline-specific skills/competencies equip Filipino learners towards success in the future.

Information, Media, and Technology Skills

This multifaceted domain manifests the 21st century skills referring to the ability to





gather, manage, use, synthesize, evaluate, and create information through media and technology.

These skills allow learners to navigate the fluid and dynamic environment of today's technologically and information-driven society and empower them to use plurality of information sources (i.e., private, government, community) and plurality of voices (i.e., from people of all levels of society) for problem-solving, decision-making, and ideation in personal, social, economic, and political life.

This domain expands the life skills, strengthens civic participation, and amplifies self-expression of individuals to use various technology, computer, and media resources effectively, efficiently, and responsibly.

Moreover, it encompasses the contributory and significant skills applied and required in all academic subjects. The fact that all learning areas make use of and present a great deal of information in different forms and modalities challenges learners to develop skills such as how to sift through and communicate ideas, and how to utilize this information through ICT, media, libraries, and archives in a critical, creative, and ethical manner.

In addition, this domain also supports and promotes the development of globally competitive Filipinos who can effectively evaluate materials, information, representations, and perspectives considering the vast amount of information accessible nowadays.

The following are the descriptions of each skill, competency, value, or attribute included under this domain:

SKILLS, COMPETENCIES, VALUES, ATTRIBUTES	DESCRIPTION	
Visual Literacy	Visual literacy accounts for the ability to closely examine interpret, and communicate understanding of diverse visual texts including but not limited to visible actions, objects symbols, natural or man-made that are encountered in the environment and across a range of text types to promote critical viewing skills.	
	 Learners manifest their visual literacy skills when they: recognize meanings in pictures and symbols describe the physical features of a location (e.g., terrain, biomes) interpret traffic signs for road safety explain processes from infographics recognise signs of an impending storm from looking at 	



	T
	the skyinterpret maps on populationanalyze messages from artworks
Information Literacy	This is a set of integrated abilities encompassing the inquisitive, analytical, and reflective process of acquiring, organizing, evaluating, sharing, and producing information with an understanding of what type of information is needed, when it is needed, where it is accessible, and how the information is socially situated and its ethical and legal considerations to use and communicate accurate and appropriate information relevant to the current context and needs of the target audience.
	Learners exhibit information literacy skills when they:
	 identify realities and make-beliefs in narratives (i.e., fictional, historical, personal) gather relevant information from valid sources estimate value from data sets discover patterns of classical and contemporary music differentiate facts and opinion in reports compare information from various sources recognize bias and stereotypes in oral and written discourse examine evidence from primary, secondary, and tertiary sources evaluate the accuracy of sources and information
Media Literacy	This develops a wide range of skills that involve understanding various media contents and their uses, accessing information efficiently and effectively, and using a broad range of media to express ideas. It involves analyzing media and creating media products and creations. This can be seen when learners examine and use media to learn how and why messages are created, produced, and interpreted, as well as how media shapes culture, values, and behaviors.
	Learners demonstrate their media literacy skills when they:
	 explain the topic through effective multimedia presentation (audio, text, motion media) recognize the issues and laws related to media and information such as copyright, intellectual property, fair use, and others. examine the data presented in weather reports compare and contrast the ways in which media (i.e., tv, radio, social media, documentaries) cover the same



	 event critique persuasive techniques used in advertisements analyze the assertions and arguments in an editorial evaluate media reports about scientific issues (i.e., climate change, cloning, nuclear technology, pandemic, etc.) create a vlog to raise awareness about social issues
Technology Literacy	Effective incorporation of information, communication, and their applications through technology is the focus of technology literacy. It includes the responsible use of appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning across all learning areas and to acquire lifelong knowledge and skills in the 21st century. This domain ultimately leads to developing abilities to use technology that enables learners to use their inventiveness to design and create ideas and concepts in solving practical problems that are technological in nature.
	 use audiobooks in listening to stories annotate key details and information in e-books manipulate measuring tools and equipment used in Science and TLE activities perform numerical data computations using calculators use sports equipment and play musical instruments for recreational activities improve performance in playing musical instruments using an audio equalizer use of assistive technology (i.e., magnifiers, talking devices, Braille displays, phone with tactile button, sensory aids, mobility aids etc.) for students with additional needs set-up an audio-visual presentation during classroom discussions assemble robotics parts following a set of procedures in a manual
Digital Literacy	Digital literacy involves the ability to define, access, manage, integrate, communicate, evaluate, and create information safely and appropriately through a wide range of digital technologies and networked devices (i.e., internet platforms, social media, mobile devices, etc.) for participation in education, social and economic life. It requires critical thinking skills, an awareness of the essential standards of



behavior for online environments, and an understanding of the social issues created by digital technologies, more than the ability to use software or operate digital device.

Learners exhibit digital literacy skills when they:

- identify and use appropriate digital applications for collaborative online activities (Google Doc, Google Slide, Trello, Whiteboard, etc.)
- explain issues pertaining to information privacy and protection, including data breach cvbersecurity
- organize online resources through bookmarking tools
- use interactive maps (Google Earth, MapMe, Zeeaps, etc.) to locate or describe a particular place
- deliver an engaging presentation using presentation tools (PowerPoint, Prezi, Canva, etc.)
- use online forum, chat room, or email following protocols
- recognize the different features and navigate the parts on a website
- practice netiquette in online (even offline) tasks during online conferencing platforms (e.g., Zoom, Google Meet, Microsoft Teams, Webex, etc.) or in learning management systems (Google classroom, Schoology, Moodle, etc.)

Learning and Innovation Skills

In the age of information and technology, it is essential for learners to manifest learning and innovation skills. This is a set of abilities where learners think critically, reflectively, and creatively; analyzes and solves problems; creates and implements innovations using a variety of techniques or methods; and generates functional knowledge that supports varying degrees of thinking skills and metacognition, thereby allowing them to easily navigate and respond to dynamic, fluid, and complex forces (both internal and external) that significantly affect their well-being.

The following are the descriptions of each skill, competency, value, or attribute included under this domain:





SKILLS, COMPETENCIES, VALUES, ATTRIBUTES	DESCRIPTION		
Creativity	Creativity refers to the ability to think and work creatively and innovatively using a variety of techniques or methods.		
	Learners draw on their creativity skills when they:		
	 create new and worthwhile ideas (both incremental and radical concepts) elaborate, refine, analyze, and evaluate their own ideas to improve and maximize creative efforts demonstrate originality and inventiveness in work and understand the real-world limits to adopting new ideas (e.g., compose an original composition applying knowledge on musical patterns, notes, etc.) provide best alternatives or options if familiar/common solutions, systems, and processes no longer works (e.g., conduct scientific experiments using alternative resources or materials available in the community) 		
Openness	Openness is the willingness to engage in new ideas, situations, and experiences.		
	 Learners draw on openness when they: identify new connections between different concepts and ideas examine things from others' perspectives consider alternative ideas and actions approach new things with curiosity seek out experiences that deviate from everyday routine pursue new experiences and creative endeavors change position/decision/action in light of new information 		
Critical Thinking	Critical thinking refers to the ability to analyze evidence, patterns, relationships, making inferences using reasoning, judging, evaluating, and making decisions or solving problems. It includes actively and skillfully conceptualizing, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action, the ability to make inferences, calculating		



	1	1	_1 _	_:_:_
probabilities	ana	making	ae	cisions.

Learners draw on their critical thinking skills when they:

- establish/detect patterns, connections, and relationships among given variables
- make inferences on various experiences and phenomena
- analyze and interpret data and information gathered from relevant and credible sources
- synthesize voluminous data and information
- generate relevant conclusions using logical, systematic and/or scientific processes
- develop criteria to judge the veracity/accuracy of a given claim
- conceptualize an idea, theory, or innovation

Problem Solving

Problem solving denotes the ability to engage in cognitive processing in order to understand and resolve problem situations where a method of solution is not immediately obvious. It involves finding a way to solve a problem and may include modelling, data analysis, logical deduction, and metacognition.

Learners draw on their problem-solving skills when they:

- recognize existing problems, impending threats, and future difficulties
- provide logical explanations on a given problem or difficulty
- identify and ask significant questions that clarify various points of view and lead to better solutions
- formulate relevant recommendations, solutions, and alternatives to a perceived problem
- solve different kinds of non-familiar problems in both conventional and innovative ways

Reflective Thinking

Reflective thinking is the ability to reflect critically on one's experiences, decisions, and processes to create meaning and justify actions so that future decisions are better informed or deliberated.

Learners draw on reflective thinking when they:

- take time to review their own behavior to think about failures and successes which may aid in self-awareness and improvement
- think of the past as opposed to their plans



Communication Skills

Communication is something we are engaged in every day may that be personally, academically, or professionally, making it a significant and relevant domain among the $21^{\rm st}$ Century Skills. This domain recognizes the value of communication for a wide range of purposes.

This domain puts premium on communication skills including all forms and contexts, including but not limited to verbal and non-verbal communication, active listening, as well as the ability to express feelings and provide feedback. This domain also covers negotiation/refusal or assertiveness skills that directly affect ones' ability to manage conflict.

Communication is considered the gateway to developing soft skills that are highly valued whether in the workplace or public life, and is also shaped by current and emerging technologies. Cognizant of the current educational paradigm, everyone is expected to engage in highly networked collaborations that enable them to execute communicative competence and multiliteracies.

The knowledge, skills, and competencies that embody communication and collaboration which include: skilled oral and written communication in the mother tongue and foreign languages; team-working especially in heterogeneous environments, open-mindedness, conflict management; cultural awareness and global awareness (ability to appreciate the value of the varied cultures and to intentionally construct cross-cultural relationships and networks); and leadership (self-motivation, initiative taking, entrepreneurship, leading by influence) are accounted for in this domain.

The following are the descriptions of each skill, competency, value, or attribute included under this domain:

SKILLS, COMPETENCIES, VALUES, ATTRIBUTES	DESCRIPTION
Teamwork	Working with others to attain common goals under the direction or instruction of a leader is important. These skills include the ability to follow an agenda and make group decisions. Learners exhibit teamwork when they:



	_
	 take actions based on the leader's instructions recognize other members' participation and contributions for task completion perform well-defined role/task toward the attainment of a shared goal
Collaboration	Collaboration is the capacity of an individual to effectively participate in interactions between at least two co-equal parties voluntarily engaged in shared decision-making as they work towards a common goal. Collaboration involves joint communication and goal setting (including planning, sharing information, discussing problems, and learning from others) as well as the need for parties to contribute information or resources that need to be pooled together for action.
	Learners exhibit collaboration when they:
	 share information/resources with other members perform tasks requiring interdependence and role flexibility negotiate with other members for roles or consideration of ideas/proposals aimed at achieving goals and resolving conflicts
Interpersonal Skills	Interpersonal skills show one's ability to communicate and read emotion, motivation, and behaviors in a social context. Good interpersonal skills involve insight, understanding, and the kind of social awareness that helps one to initiate, sustain, and end a conversation appropriately within a given situation.
	Learners exhibit interpersonal skills when they:
	 approach other learners to start or join in a conversation ask specific information and make follow-up comments about the topic of conversation introduce additional information or related topics that sustain conversation receptive to the feelings, needs, and dispositions of others
Intrapersonal Skills	This refers to the internal dialogue one has with himself or herself. Good intrapersonal communication skills help one manage his or her emotions effectively, set goals, self-motivate, cope with distractions, strategize, and adjust his or her approach in any given situation or as needed.



	 Learners exhibit intrapersonal skills when they: think of possible consequences of a behavior before acting it out examine their own behaviors and how these affect them and the people around them plan how to address behaviors that usually produce unsatisfying consequences
Interactive Communication	This focuses on building oracy skills including listening and speaking. This includes diverse communication methods.
	Learners exhibit interactive communication when they:
	 ask for or provide information of interest to other learners actively engage in a discourse expressing feelings, insights, opinions, and criticisms about the information use digital technologies and applications to extend communication to a variety of audiences
Non-Verbal Communication	Non-verbal communication includes facial expressions, gestures displayed through body language (kinesics) and the physical distance between the communicators (proxemics).
	Learners exhibit non-verbal communication when they:
	 recognize and respond to eye and hand movements, facial expressions, and other gestures utilize body language (kinesics) and touch (haptics); as well as optimize physical distance between the communicators (proxemics) to respond appropriately in a given situation use cool colors to project an image of friendliness or poise as in their choice of attire or in illustrations
Communicating in Diverse Environments	This ensures that individuals from varied backgrounds, religions, genders, communities, and age groups share strong rapport and do not face problems working together.
	Learners communicating in a diverse environment:
	 use simple words and sentences when talking to children use appropriate language register depending on the context (formal or informal) employ gender-sensitive words in conversations and



	discourses • manifest sensitivity (i.e., choice of words, non-verbal cues) in communicating one's ideas and responses • adjust communication style and behavior to suit the needs of the person they are communicating with
--	---

Life and Career Skills

Life and career skills prepare learners to make informed life and career decisions to enable them to become citizens that engage in a dynamic global community and to successfully adapt to meet the challenges and opportunities to lead in the global workforce. These are critical for our learners to become active responsible citizens who hold meaningful and productive jobs and businesses that will contribute to the sustainability and welfare of the community.

The following are the descriptions of each skill, competency, value, or attribute included in this domain:

SKILLS, COMPETENCIES, VALUES, ATTRIBUTES	DESCRIPTION
Informed Decision- Making	Informed decision making refers to one's ability to make decisions based on facts or information focusing on the risks and benefits involved. The process involves identifying the problem, collecting data and information, brainstorming all possible alternatives, weighing the alternatives by considering available resources, making a choice, enacting a plan, and reviewing the decision. Learners draw on informed decision-making when they: • research relevant data to make decisions for class projects • ask for expert opinions and interviews • conduct cost-benefit analysis • read various texts and information on a topic to gain different perspectives before making a decision • identify options for course of action
Adaptive Leadership	Adaptive leadership shows the ability to organize people proactively where they are motivated to achieve tasks effectively. Learners are future leaders of the nation and must therefore be equipped with the art and skills of leadership which include resolving conflicts, developing people, being accountable, and adapting to a complex and rapidly changing



environment. They must also be morally upright and ethically grounded.

Learners draw on their adaptive leadership skills when they:

- make opportunities to develop the talents of others
- set good examples for classmates and peers
- help classmates review for paper and pen tests and performance tasks
- build camaraderie with peers
- show obedience to teachers and other authorities

Intercultural Understanding

Intercultural understanding involves learners seeking their own culture in order to understand local and global issues, and engaging in diverse cultures and identities (e.g., gender, languages, socio-economic backgrounds, ethnic groups, citizenship, etc.). Building intercultural understanding supports learners to recognize commonalities and differences, create connections with others, cultivate mutual respect, and promote human rights, peace, and non-violence.

Learners draw on intercultural understanding when they:

- participate in cultural activities in school
- listen to the opinions of people from other cultures
- respect religious beliefs and traditions
- help a classmate coming from a different community adapt to the new environment
- read current events and editorials about other cultures

Self-Discipline

The ability to set goals with tangible and intangible success criteria requires self-discipline. It is a balance of short and long-term goals to manage one's workload efficiently by controlling impulses and delaying gratification. This is necessary to manage one's life in an organized, industrious manner to give meaning and purpose in a changing environment.

Learners draw on their self-discipline skills when they:

- choose to eat healthy food
- organize their time to exercise punctuality
- set academic goals and persevere
- work on their assignments diligently
- study and prepare for paper-and-pen tests and performance tasks



Future Orientation

Learners need the ability to consider future developments and consequences when thinking, making decisions, and acting, directed towards a more sustainable future. Future orientation refers to a well-balanced consideration of society, environment, culture, and economy in pursuit of an improved quality of life for future generations. Future orientation allows individuals to envision the needs of the present without compromising the sustainability of future generations.

Learners draw on future orientation when they:

- join tree-planting activities
- consider the possible consequences before clicking in an online platform
- participate in student elections
- show prudence in spending
- save money

Resilience and Adversity Management

This refers to the process of constructively moving forward or advancing despite adversity or challenges that are not within one's control. Being resilient allows learners to adapt with flexibility to new environments, lifestyles, emerging challenges, or when faced with stressors. It involves taking a growth mindset, being open to change, all of which involves profound personal growth.

Learners draw on resilience and adversity management when they:

- go to school despite difficulties (e.g., geographical, climatic, economic, etc.)
- exhibit honesty especially with teachers when they do not understand instructions
- find ways to complete assignments in spite of possible power failure in the community
- show readiness, awareness, and ability to plan well when faced with natural calamities (e.g., typhoons, earthquakes, fires, etc.)
- persevere in finding solutions to problems despite failures (e.g., complete a task through trial and error)

Intensified Values Education

The MATATAG K to 10 Curriculum addresses the need to complement the knowledge and skills development of learners with values development – making the curriculum more holistic as it strikes a balance between competence and character. Aside from providing a separate learning area for values formation, as mandated by RA 11476 or the Good Manners and Right Conduct and Values Education Act, there is a



systematic integration of DepEd core values across all learning areas with explicit placements in relevant topics and contents in all grade levels. These are further reinforced by the Whole School Approach involving home, school and community in the co-curricular and extra-curricular programs and activities related to values formation. Further, the GMRC and VE Curriculum will have an increased time allotment for teaching and learning.

Strengthened Peace Education

Peace education, as a transformative paradigm, seeks to change mindsets, values, and behaviors that have led to direct, structural and other forms of violence in our society. It intends to build awareness, concern, and action towards nonviolence, justice, and environmental care (DepEd Memorandum No. 469 s. 2008).

The MATATAG Curriculum will ensure systematic and intentional peace education integration not only to guarantee that the country will meet the 2030 target but also to improve the overall quality of education. It ensures that all learners acquire the knowledge, skills, and attitudes in promoting sustainable development, human rights, gender equality, the culture of peace and non-violence, and appreciation of cultural diversity among others.

Other Features of the MATATAG Curriculum

Redesigned Kindergarten Curriculum

The redesigned Kindergarten Education espouses a learner-centered, learning-centered, integrated, developmentally appropriate, play-based and nationalistic curriculum that aims to develop holistic learners equipped with foundational skills, imbued with physical, social, emotional, cognitive, and values development.

The Kindergarten curriculum presents curricular themes such as Knowing Who We Are and Our Families, exploring our Community, Appreciating Our Country, and Caring for Our World, each having an effect on a child's holistic development. In addition, the domains of development in the redesigned Kindergarten curriculum are socio-emotional, values, physical health and motor, aesthetic/creative, cognitive and language, literacy, and communication.

Moreover, Kindergarten learners are assessed in the class through regular and continuous observation of their works and performances that showcase their knowledge, skills, and abilities exhibited during the actual conduct of blocks of time. Learners are evaluated at the start of the school year using the Philippine Early Childhood Development (ECD) Checklist, a developmental screening tool that provides information about the learners' stage of development and aids the teacher in identifying any delays.

The Progress Report contains components that are aligned with the learning competencies from the Kindergarten Curriculum Guide. This will serve as a checklist to evaluate the overall performance of the learner in every quarter.





Emphasis on the Engineering Design Process

The Science, Technology, Engineering and Mathematics (STEM) are four interconnected disciplines which offer cross-disciplinary instruction on real-world applications. Though Science, Mathematics and Technology and Livelihood Education (TLE) are distinct and separate learning areas, the skills and competencies are interrelated and cut across subject areas. These learning areas draw on each other while being taught separately.

The Engineering Design Process (EDP) adopted by the Department includes the following steps: Empathize, Define, Generate Ideas, Create, and Evaluate. It is iterative and the process may revert to the previous step at any stage. This design process is used to come up with solutions to real-world problems and teaches the learners to innovate. The possible solutions may take many forms such as a product, a process, a strategy, a response, or a model. The possible solution is evaluated to see if it works or whether the end-users find it useful and relevant.

The use of EDP develops several skills such as critical and creative thinking, problem solving, decision-making, communication skills, ICT literacy, growth mindset, grit, and self-management. The EDP is also appropriate for learners of all ages. Young learners can apply EDP on problems within their interest, while older learners can design solutions for problems in school, at home, and in the community. Many of the performance standards in the science curriculum employ the engineering design process to design and build to provide possible solution to real-world problems.

Merging the Concepts of MAPEH in Key Stages 2 and 3

The Matatag MAPEH Curriculum merges Music & Arts and Physical Education & Health as two distinct components. The curriculum framework focuses on developing 21st century Filipino lifelong learners, who are at the center of the educational approach. The integration of Music & Arts and Physical Education & Health aims to enhance the skills and competencies of learners in these components. It emphasizes the importance of music and arts in shaping cultural identity, creative communication, and multicultural literacy. Additionally, the framework for physical education and health components promotes the development of healthy habits and active lifestyles, contributing to the well-being of individuals and society.

Rationalization of Technical-Vocational-Livelihood Specialization

The learners in Grades 4 to 6 will explore the fundamental home skills (one skill per component) of the four components of EPP/TLE (Information and Communications Technology [ICT], Agriculture and Fishery Arts [AFA], Family and Consumer Science [FCS], and Industrial Arts [IA]). The basic and common competencies of the four TLE components will be introduced in Grades 7 to 8. In Grades 9 and 10, selected core competencies will be taken in every sector with intensified entrepreneurial skills (exploratory by sector). The specializations will no longer be offered in JHS and will be taken instead in Senior High School.





Redesigned Araling Panlipunan 7 Curriculum

Significant change has been introduced in Araling Panlipunan 7 where vital content and competencies cater on the Philippine Contemporary History highlighting its complex relationship in with Southeast Asian societies. The departure from Asian Studies Ang Pilipinas at Timog Silangang Asya intends to strengthen our Southeast Asian identity.

By acquainting Filipino learners with their Southeast Asian counterparts while discussing their history and culture among others. This is a necessary part of the Integration thereby advancing the global citizenship competencies of the Filipino learners an essential component of the Southeast Asia Primary Learning History lessons, beyond the parochial paradigm, aims to Metrics (SEA-PLM). reinforce the overall goal of the Araling Panlipunan curriculum, that is, to develop among learners a critical understanding of historical, geographical, socio-political, and economic issues of the Philippines.

PEDAGOGY AND ASSESSMENT

Curriculum, pedagogy, and assessment are the three equally important aspects of the teaching and learning process. These educational terms broadly describe the content of instruction, the processes involved in teaching-learning, and the assessment of the acquired knowledge and skills of learners, respectively. Teachers' understanding of how these three concepts interplay in educational practice predicts the success of both teaching and learning in the classroom. Consequently, the Department is equitably putting curriculum, pedagogy, and assessment as important considerations in designing the educational landscape for Filipino teachers and learners.

The impact of the COVID-19 pandemic on education is both unprecedented and widespread in education history, affecting nearly every student in the world (UNICEF 2020; United Nations 2020). Despite the pandemic's devastating effects, it has provided extraordinary opportunities to recalibrate curriculum standards, alternative learning delivery modalities, and assessment. In response to emergency situations such as the pandemic, the roles of schools - students, teachers, administrators, parents, and the community - have pivoted. With the emergence of the COVID-19 crisis, there is a need for everyone in the school community to re-align and sustain their roles to better respond to the current challenges in basic education. The following sections aim to provide an overview of the changing roles that students, teachers, administrators, parents, and the community will have to take so that they may contribute to redefining how curriculum standards should be delivered amid the pandemic. Further, it will present the pedagogical approaches employed for each learning area, the nature of the classroom and international assessments, and how pedagogy and assessment shape the MATATAG Curriculum.



The Changing Role of Schools: Students, Teachers, Administrators, Parents, Community

Pedagogical modifications have proved to be critical as conventional in-person classroom instruction does not translate well to a remote learning environment. Teachers are therefore expected to modify their practices and provide innovative opportunities for their students to stay motivated and engaged regardless of the type of learning delivery used (modular, online, TV, radio, blended distance learning, etc.). Teachers are likewise encouraged to use various strategies to monitor student learning remotely. Faced with the challenges of remote teaching, they may utilize high-tech and low-tech approaches to reach out to parents/guardians and their children and better support their learning progress.

To effectively support the delivery of the curriculum, it is crucial for school administrators and instructional leaders to provide relevant professional development activities for their teachers to achieve their full potential in implementing various remote learning modalities, and in turn, focus on what is pedagogically effective and appropriate for learners. Likewise, school administrators and instructional leaders have to provide socio-emotional and psychosocial support not just for teachers, but also for students and parents/guardians to ensure their well-being so that they are able to thrive in the home-based learning set up. Further, school administrators and instructional leaders ought to continuously strengthen and sustain relationships and collaborate with education partners and stakeholders in adapting to the demands of the new curriculum standards and remote learning.

Today's generation of students is much more tech-savvy than previous ones. This is an educational advantage as current technology provides them with wide and instant access to a variety of information and learning resources. With the current pandemic, every household has become a classroom with less interaction with teachers, consequently obliging learners to be more actively engaged in their own learning. Learners are encouraged to make well-informed choices about their own learning progress under the guidance of a teacher. With the challenges of remote learning, schools would have the discretion of managing the intense requirements of the curriculum. In doing so, they may start allowing students to negotiate part of their curriculum instead of requiring all students to learn the same content on equal levels. Taking off from the lessons of the pandemic, there will be times when classes may be done remotely where **students** are expected to be autonomous in their learning, being able to choose how they want to learn, where they want to learn, and how they want their learning to be assessed.

The continuous closure of brick-and-mortar schools and learning centers to prevent COVID-19 transmission warrants parents to transition themselves into home-based learning facilitators of their children, particularly for those under modular learning modality. At present, they have assumed this role as their children attend school virtually or remotely. Parents and guardians are expected to constantly communicate with the school through the teachers to be on track in providing learning support to their children. Through adequate resources and school support, their success as learning facilitators can be ensured.





It is important to consider the curriculum and its different means of delivery as evolving depending on the needs and demands of the present time and context. Along with this, school communities must be able to accommodate changes in their roles to ensure success in the delivery of education services in general and the implementation of the curriculum in particular.

With both the present realities and the emerging needs of the future, the Department is prompted to reshape the basic education curriculum which demands a new landscape for teaching and learning. Improving the quality of teaching and learning requires the provision of quality educational opportunities and experiences to learners. This can be realized by employing effective pedagogies in the teaching and learning process, which, when consistently implemented, would result in greater student outcomes across the curriculum.

Section 5.E of the Enhanced Basic Education Act of 2013 (RA 10533) necessitates the use of pedagogical approaches that are **constructivist**, **inquiry-based**, **reflective**, **collaborative**, and **integrative**. Other important pedagogical approaches utilized in most learning areas across grade levels are **differentiated instruction**, **explicit teaching (direct instruction) approach**, **experiential learning approach**, **culture-based instruction**, and **technology-enhanced instruction**. These pedagogies or their combination with other teaching approaches shall be used by the teachers to ensure the development of the 21st century skills of learners.

Pedagogical Approaches for the Different Learning Areas

The MATATAG Curriculum shall maintain constructivist, inquiry-based, reflective, collaborative, and integrative pedagogical approaches as outlined in RA 10533 and DepEd Order No. 21, s. 2019. The pedagogical approaches discussed in the Shaping Papers of the different learning areas are rooted in various learning theories and principles; however, teachers are given the prerogative to employ other methods and strategies deemed suitable to the lessons and learners' diverse needs, contexts, interests, and styles.

Choosing and utilizing the appropriate pedagogical approach is vital for successful learning. Therefore, teachers must be cautious in selecting their approaches, considering learning goals, styles, subject matter, available materials, learners' diversity, classroom situation, and context. The chosen pedagogical approaches should allow learners to develop 21st century skills, embody core values, and meet curriculum standards.

The implementation of the recalibrated curriculum and various learning delivery modalities is not limited to in-person classes. These pedagogies are designed to enhance the knowledge transfer process from teachers to learners, and between learners themselves. With adequate support, teachers are expected to be well-versed in the curriculum content and adapt to the evolving instructional needs brought about by different learning delivery modalities.

The pedagogical approaches best suited to the acquisition of learning and development of skills enshrined in the respective curriculum content of each of the





learning areas are anchored on various learning theories and principles. These pedagogical approaches, as enumerated below, are explicitly reflected in the Curriculum Framework of each learning area.

TABLE 4Pedagogical Approaches for the MATATAG Curriculum

LEARNING AREA	PEDAGOGICAL APPROACHES
Kindergarten	Constructivist, Integrative, Thematic, Collaborative,
	Reflective, Play-based Approach
Filipino	Cooperative Learning, Discovery Learning, Hierarchical
_	Learning, Interactive/Integrated Learning
English	Integration, Learner-centeredness, Contextualization,
	Construction/Constructivist
Reading and Literacy	Shared Reading, Guided Reading, Phonics, Vocabulary
	Building, Comprehension Strategies such as predicting,
	questioning, summarizing, and making connections,
	Interactive Read-Aloud activities
Language	Oral proficiency in the student's first language (L1) through
	play activities or socialization, idea exchange, and phonemic
	awareness; organized discourses and verbal performances
	which expose students to different language forms and
	vocabulary and which includes academic terms in L1 across
	various content areas, associating words with real objects
	and pictures as well as spoken and written texts and
	symbols
Good Manners	Ethical Decision Making, Social and Emotional Learning,
and Right Conduct	Career Guidance, Virtue Ethics Theory, Value Ethics Theory,
(GMRC)/ Values	Interactive, Experiential, Constructivism, Career
Education (VE)	Development Theory
Mathematics	Discovery and Inquiry-based Learning, Experiential and
	Situated Learning, Reflective Learning, Cooperative Learning,
	Constructivism
Science	Inquiry-based Approach, Problem-based Learning, Science-
	Technology-Society Approach / Contextual Learning,
	Multi/Interdisciplinary Approach, Constructivism, Social
	Cognition Learning, Learning Style/Differentiated
	Instruction, Brain-based Learning
Araling Panlipunan	Thematic-Chronological Approach, Integrative, Conceptual,
	Research-based Approach, Interdisciplinary and
26.1.1	Multidisciplinary Approach
Makabansa	Thematic-Chronological Approach, Integrative, Conceptual,
	Research-based Approach, Interdisciplinary and
D11	Multidisciplinary Approach
Edukasyong Pantahanan	Entrepreneurial Learning, Authentic Learning,
at Pangkabuhayan	Constructivism, Contextualization, Integrative, Experiential
(EPP)/	Learning



Technology and Livelihood Education (TLE)	
Music, Arts, Physical	Music: Multicultural, Integrative,
Education and Health	Arts: Child-centered, Hands-on
(MAPEH)	PE: Activity-based, Developmentally Appropriate, Standard-
	based, Integrative, Inclusive
	Health: Culture-responsive, Epidemiological, Health and Life-
	skills based, Holistic, Learner-centered, Preventive, Rights-
	based, Standards and Outcomes-based, Values-based

Given the varied needs of learners and the evolving demands of the times, it is imperative to also make changes in learning delivery. Teachers must adapt their methods and strategies to keep learners engaged across all modalities, continually evaluating and adjusting their practices.

School heads and instructional leaders must provide ongoing professional development focusing on effective teaching practices, offer timely technical support to teachers, and encourage their creative freedom in teaching. They should also foster new partnerships, strengthen existing relationships, and collaborate with stakeholders and the community to meet the new curriculum standards and learning delivery demands.

In the modern educational landscape, learners should be tech-savvy, engaged, selfaware of their learning process, and capable of making well-informed decisions, thereby promoting independent learning. Schools should prioritize student autonomy in their learning decisions and methods, make learning more meaningful by connecting it with real-world problems, and use authentic assessment methods.

Parents and legal guardians must be prepared to act as learning facilitators, especially for blended and distance learning, regularly communicating with schools to understand their children's learning progress and needs. A strong home-school collaboration culture must be upheld among schools.

The Instructional Design Framework for Kindergarten to Grade 10

RA 10533, which clearly defines the curriculum as learner-centered, developmentally appropriate, inclusive, hence promoting the use of constructivist, inquiry-based, reflective, collaborative, and integrative pedagogical approaches, forms the foundation for the K to 10 Instructional Design Framework.





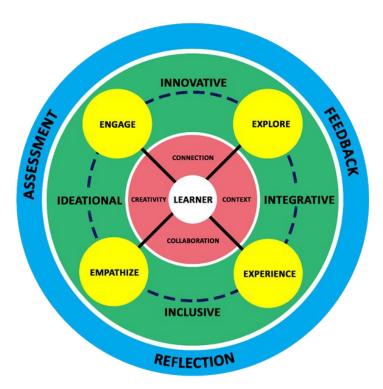


Figure 4. The Kindergarten to Grade 10 Instructional Design Framework

The following are the key features of the K to 10 Instructional Design Framework:

- It cuts across all learning stages and key stages.
- It emphasizes the learners rather than the process. It enables learners to take part in making decisions about creating learning activities.
- It gives directions and brings together school administrators, teachers, and learners in a shared understanding of how to accomplish learning objectives and discuss and enhance learners' progress.
- It provides flexibility in promoting creativity and collaboration not only among learners but also among teachers and instructional leaders.
- It is descriptive rather than prescriptive. It outlines the key elements and considerations in adopting teaching strategies, teaching materials, and the educational approach required to achieve learning standards.
- It provides the design of instruction and does not direct its procedures. Thus, the pedagogical approaches and models to be used in instruction will provide the methods and procedures.
- It serves as a guide for implementing uniformity and consistency in designing and planning the lesson.

The Four Instructional Principles

The four instructional principles (4Is) for basic education are inclusive, ideational, integrative, and innovative. These principles aim to promote holistic learning, lifelong



learning pursuit, and equip learners to become informed decision-makers and productive workforce members.

- "Inclusive" emphasizes creating accessible and meaningful learning experiences for all learners, regardless of their backgrounds or abilities. It entails developing culturally responsive materials, providing various modalities for content access, accommodating learners with special needs, and adjusting the learning environment to allow multiple learning pathways.
- "Ideational" involves fostering a creative thought process and idea generation without judgment or criticism. It aims to expose learners to a variety of potential solutions and discover unexpected idea connections.
- "Integrative" involves combining different elements into a unified whole, building on learners' prior knowledge, utilizing real-life situations, and encouraging connections between different concepts and ideas. This principle aids learners in relating the content to their lives and deepening their topic understanding.
- "Innovative" explores creative ways of designing and delivering instruction. It includes the use of emerging technologies, varied teaching methods, and innovative assessment strategies to ensure a motivating and engaging learning experience for learners.

The Four Key Aspects of Instructional Design

The 4Cs: context, connection, collaboration, and creativity represent key aspects of instructional design, impacting the planning, delivery, and assessment of the teaching and learning process.

- "Context" refers to the background or setting that impacts how learners understand information. By relating teaching materials to learners' daily life experiences, context enhances learners' motivation to participate actively in learning activities.
- "Connection" involves fostering understanding and the development of transferable knowledge. It aims for students to build robust, flexible knowledge that can be applied to new problems and contexts.
- "Collaboration" is the cooperative process where students work together to achieve a common goal. It recognizes students' individual skills and holds them equally accountable for outcomes or knowledge sharing, preparing them for lifelong interaction with others.
- "Creativity" encourages learners to use their imagination and critical thinking to create meaningful expressions of their learning. It promotes the generation of new ideas and the transformation of existing solutions into more innovative and sustainable ones.





The Four Essential Facets of Learning

The **4 Es (Engage, Explore, Experience, and Empathize)** are crucial elements for creating effective, engaging learning experiences that aren't strictly procedural and can occur at any point during a lesson, based on a teacher's judgment and learner-centric focus.

- "Engage" aims to capture learners' attention and stimulate interest by using various strategies and techniques that promote active participation. By creating an emotional connection, it enhances learners' motivation and willingness to learn.
- "Explore" encourages learners to independently discover new concepts and ideas. It includes opportunities for learners to experiment, solve problems, or pose questions, fostering active learning and problem-solving skills.
- "Experience" allows learners to apply their acquired knowledge, skills, abilities, and attitudes in real-world contexts. Simulations, case studies, and other practical activities facilitate the transfer of learning to real-life situations.
- "Empathize" encourages learners to understand and connect with the material they are learning, and to identify their own needs. This component supports socioemotional learning and helps learners form bonds, improve communication, and resolve conflicts.

Assessment, Feedback, and Reflection

Assessment in the instructional delivery process is crucial as it gauges the level of mastery of expected competencies and development of skills according to learning standards. As outlined in DepEd Order No. 8, s. 2015 or the "Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program", classroom assessment is an ongoing process, carried out at any point in a lesson, to gather and interpret data about learners' knowledge and skills. Teachers should holistically measure learners' abilities, recognizing the diversity of learners and the need for various ways to measure their potential, and enabling learners to take part in the assessment process.

Formative assessment, involving real-time feedback for learning adjustment and self-reflection, is crucial, and learner-to-learner feedback is highly encouraged to enhance learning experiences and growth areas identification. This formative assessment helps learners become independent, and capable of managing and assessing their own learning progress. On the other hand, summative assessment is conducted at the end of a learning duration or episode to measure the attainment of learning standards and learners' application of their knowledge in various situations. The results communicate learners' achievements to them, their parents or guardians, school heads, succeeding grade teachers, and guidance counselors.





Feedback is essential information about learners' performance from assessments, aimed at facilitating their growth and improvement. Feedback can be either positive or negative but should always be presented in a supportive, respectful, and constructive manner. It can also come from learners to teachers, informing them about the effectiveness of their teaching strategies.

Reflection, a critical part of assessment, involves learners identifying areas of improvement and progress in their learning experiences. It aids learners in making connections between theory and practice, exploring their experiences' complexities, and developing higher-order thinking skills. Thus, instruction under the Kindergarten to Grade 10 Instructional Design Framework effectively helps learners by utilizing assessment, feedback, and reflection.

It is envisioned that instruction shall utilize all these variables under the Kindergarten to Grade 10 Instructional Design Framework. All other provisions stipulated in DO 8, s. 2015 relative to classroom assessment shall remain in force and in effect.

3rd Floor, Bonifacio Building, DepEd Complex, Meralco Avenue, Pasig City 160 Telephone Nos.: (02) 8-632-7746; 8-636-5173; Email Address: bcd.csdd@deped.gov.ph



REFERENCES

- Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice*. doi:10.1080/0969594X.2018.1441807
- Black, P., & Wiliam, D. (2010). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 92(1), 81-90. doi:10.1177/003172171009200119
- Brookhart, S. M. (2020, August). What grading and assessment practices could schools use in the year ahead? PACE, Stanford Graduate School of Education, and Answer Lab, USC Rossier.

 https://theanswerlab.rossier.usc.edu/wp-content/uploads/2020/09/Answer-Lab-Grading-202009-v1.pdf
- Cagasan, L., Care, E., Robertson, P., & Luo, R. (2020). Developing a formative assessment protocol to examine formative assessment practices in the Philippines. Assessment in Education: Principles, Policy & Practice. doi:10.1080/10627197.2020.1766960
- Charles, R. (2005) Big ideas and understandings as the foundation for elementary and middle school Mathematics. *NCSM Journal 7* (3), 9-24. https://thelearningexchange.ca/wp-content/uploads/2011/10/BigIdeas_NCSM_Spr05v7.pdf accessed April 27, 2021
- Christodoulou, D. (2017). *Making good progress?: The future of assessment for learning*. Oxford University Press.
- Darling-Hammond, L., Herman, J., Pellegrino, J., et al. (2013). *Criteria for high-quality assessment*. Stanford CA: Stanford Center for Opportunity Policy in Education.
- Department of Education (2016). Edukasyong Pantahanan at Pangkabuhayan and Technology and Livelihood Education Curriculum Guide. Pasig City: Deped
- Department of Education. (2016). *K to 12 Gabay Pangkurikulum ng Filipino*. Pasig City: DepEd
- Department of Education (2016). Language Arts and Multiliteracies Curriculum Guide. Pasig City: DepEd.
- Department of Education (2016). Mathematics Curriculum Guide. Pasig City: DepEd.
- Department of Education (2016). *Mother Tongue Curriculum Guide*. Pasig City: DepEd.





- Department of Education (2016). *Omnibus Policy on Kindergarten Education*. Pasig City: DepEd.
- Department of Education (2016). Science Curriculum Guide. Pasig City: DepEd.
- Department of Education Order No. 31, s. 2020. *Interim guidelines for assessment and grading in light of the Basic Education Learning Continuity Plan.* Pasig City: DepEd.
- Department of Education Order No. 21, s. 2019. *Policy guidelines on the K-12 Basic Education Program.* Pasig City: DepEd.
- Department of Education Order No. 27, s. 2017. Research management guidelines. Pasig City: DepEd.
- Department of Education Order No. 55, s. 2016. *Policy guidelines on the national assessment of student learning for the K to 12 Basic Education Program.* Pasig City: DepEd.
- Department of Education Order No. 8, s. 2015. *Policy guidelines on classroom assessment for the K to 12 Basic Education Program.* Pasig City: DepEd.
- Enhanced Basic Education Act of 2013, RA 10533 (2013).
- Executive Order No. 83, s. 2012. Institutionalization of the Philippine Qualifications Framework. Manila: Malacanan.
- Frost & Sullivan. (2016). World's top global mega trends to 2025 and implications to business, society, and cultures. *Macro to Micro Implications of Mega Trends for the World.* https://www.thegeniusworks.com/wp-content/uploads/2016/01/Megatrends-2025-Frost-and-Sullivan.pdf
- GMRC and Values Education Law, RA 11476 (2020).
- Jorgenson, O. (2006). Why curriculum change is difficult and necessary. *Independent School.* https://www.nais.org/magazine/independent-school/summer-2006/why-curriculum-change-is-difficult-and-necessary/
- Marope, M., Griffin, P., & Gallagher, C. (2017). Future competences and the future of curriculum. http://www.ibe.unesco.org/en/news/document-future-competences-and-future-curriculum
- McKinsey & Company. (2017). *Jobs lost, jobs gained: Workforce transitions in a time of automation*. https://www.mckinsey.com/mgi/
- Missouri Baptist University (n.d.). *The Big Idea.* https://www.mobap.edu/wp-content/uploads/2013/03/The_Big_Idea.pdf





- Mullis, I., Martin, M., Foy, P., Kelly, D. & Fishbein, B. (2020). *TIMSS 2019 International Results in Mathematics and Science*. https://timssandpirls.bc.edu/timss2019/international-results/
- National Commission for Culture and the Arts. (2020). *A study on Filipino values: A primer.* Manila: NCCA
- OECD. (2020). *The futures of education and skills: Education 2030*. Retrieved from https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(0 5.04.2018).pdf
- Robertson, P., Bustos, T., Rickards, F., Ferido, M., Bagui, L., Dela Cruz, J., & Kheang, T. (2020). *Review of the intended curriculum*. Quezon City: Assessment Curriculum and Technology Research Centre (ACTRC)
- Schleicher, A. (2018). *PISA 2018: Insights and interpretations*. https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpret ations%20FINAL%20PDF.pdf
- UNESCO. (n.d.). *Standards-based curriculum*. http://www.ibe.unesco.org/en/glossary-curriculum-terminology/s/standards-based-curriculum
- UNICEF & SEAMEO. (2020). SEA-PLM 2019 Main Regional Report Summary: Children's learning in 6 Southeast Asian countries. Bangkok, Thailand: United Nations Children's Fund (UNICEF) & Southeast Asian Ministers of Education Organization (SEAMEO) SEA-PLM Secretariat.
- World Bank (2016). Assessing basic education service delivery in the Philippines:

 The Philippines public education expenditure tracking and quantitative service delivery study.

 http://documents1.worldbank.org/curated/en/507531468325807323/pdf/AUS6799-REVISED-PH-PETS-QSDS-Final-Report.pdf
- World Manufacturing Forum. (2019). *The World Manufacturing Forum report: Skills for the future of manufacturing*. https://worldmanufacturing.org/wp-content/uploads/WorldManufacturingFoundation2019-Report.pdf

