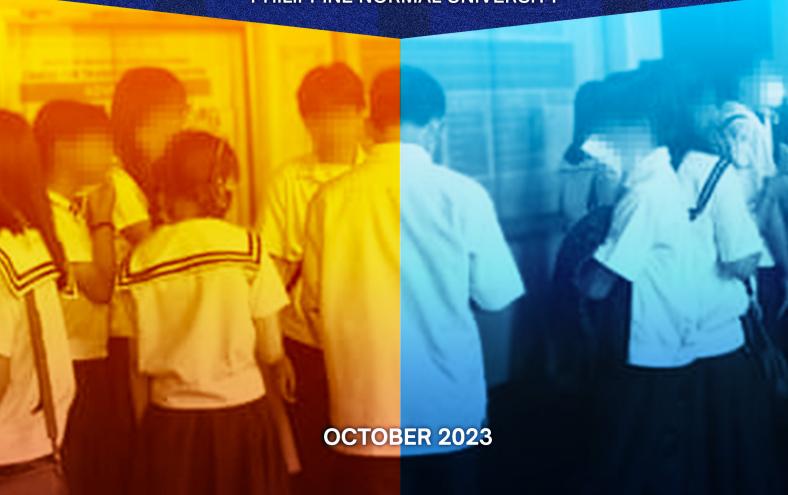


Analysis of the Basic Education School Year Calendar in the Philippines: Inputs to Policy

EDUCATIONAL POLICY RESEARCH AND DEVELOPMENT CENTER PHILIPPINE NORMAL UNIVERSITY





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ACRONYMS AND ABBREVIATIONS

ALS Alternative Learning System

APEC Asia-Pacific Economic Cooperation

ASEAN Association of Southeast Asian Nations

BARMM Bangsamoro Autonomous Region in Muslim Mindanao

CALABARZON Cavite, Laguna, Batangas, Rizal, and Quezon

CAR Cordillera Administrative Region

Covid-19 Coronavirus Disease

DepEd Department of Education

DO DepEd Order

F2F Face-to-Face

GCM Global Climate Model

NCR National Capital Region

PHIVOLCS Philippine Institute of Volcanology and Seismology

RA Republic Act

SEA Southeast Asian

SOCCKSARGEN South Cotabato, Cotabato, Sultan Kudarat, Sarangani, and General

Santos

SWS Social Weather Stations

SY School Year

UNESCO United Nations Educational, Scientific, and Cultural Organization

UNICEF United Nations International Children's Emergency Fund

VOG Volcanic Smog

WRF Weather Research Forecast

ANALYSIS OF THE BASIC EDUCATION SCHOOL YEAR CALENDAR IN THE PHILIPPINES: INPUTS TO POLICY

EXECUTIVE SUMMARY

There have been recent calls from various sectors to revert to the basic education school calendar that begins in June and ends in March. Results from a commissioned Pulse Asia survey conducted from June 19 to 23, 2023 showed that eight out of 10 Filipinos want to bring back the students' April and May summer break. Moreover, a survey conducted by the Social Weather Stations (SWS) from June 28 to July 1 showed that about nine in every 10 Filipinos prefer the June to March school calendar. Related to this, House Bill 8550 was filed in the House of Representatives, proposing the restoration of the June-to-March school calendar. This bill aims to revise Section 3 of the Republic Act 7797, also recognized as the law extending the school calendar from two hundred (200) days to a maximum of two hundred twenty (220) class days.

Given the above, this two-part study gives inputs to the discussion on the basic education school calendar by (1) describing the Filipino teachers' preference for the opening of the school year calendar; and (2) comparing and contrasting Asian countries' basic education school calendar and their reasons for adopting their calendars. Two research designs were utilized in the study. A descriptive method using online surveys was used to shed light on the first objective (Study 1) while a comparative cross-sectional study with document analysis was used to answer the second objective (Study 2).

Key Findings

- 1. Using data from an online survey of public basic education teachers (N = 1,096) from various regions in the Philippines, the Study 1 results show that 85.9% of the teacher-respondents had a preference for commencing the school year in June, while 14.15% preferred August. The foremost reasons behind the teachers favoring a June commencement of classes are *Climate and Weather Considerations* and *Health of Students*. These factors ranked the highest among several criteria when selecting the month of school opening. As evident in the results of qualitative analysis, the June to March school calendar is deemed more conducive to learning compared to the August to May schedule, primarily due to the elevated heat index during the final quarter of the school year. The other factors that the teacher-respondents deemed important in their preference for the opening of classes are *Health of Teachers, Student's Well-being*, and *Teacher's Well-being*.
- 2. The results of the qualitative data analysis showed that the teacher-respondents' reasons for their preference for school opening are related to *school*, *health*, and *family and tradition*. The most typical reasons provided are related to health and school. In terms of school-related reasons, the most typical reasons provided refer to April and May being less conducive to teaching and learning. Interestingly, the teacher-respondents discussed the importance of health of both teachers and students.

Teacher-Respondents' Reasons for Their Preference on School Opening

Themes	Sub-themes
School-related reasons	Conduciveness to teaching and learning ¹ Inadequate school facilities during summer ¹ Less suspension of classes ² Alignment of school calendar with international practice ² Avoidance to new adjustment ²
Health-related reasons	Teachers and students' health ¹
Family and tradition- related reasons	Family bonding time ¹ Cultural appropriateness ¹ Participation in income-generating activities during summer ¹

¹Reasons for June Opening of Classes; ²Reasons for August Opening of Classes

3. The analysis of the country's trend on typhoons indicated an almost insignificant variance within the past three school years in terms of typhoons. The June to March calendar accounts for 16.8% of typhoons, whereas the August to May calendar has a share of 15.65%. Regarding public holidays, the June to March academic calendar observes fewer public holidays (13 in total) compared to the August to May schedule (18 in total). Table 2 shows the comparison between two prospective scenarios for school opening.

Comparison between Two Prospective Scenarios for School Opening

Period (10 months)	Average Number of Typhoons	Number of Definite Holidays
June to March	16.8	13
August to May	15.65	18

4. Results from Study 2 were sourced from the policies and practices of the education systems of the nine ASEAN countries. A comparative analysis of the school data and related constructs (e.g., climatic conditions, cultural and religious practices, economic aspects, policies, and platforms for dissemination) to school duration and school opening provides a broad glimpse of how these school data and related constructs weave and interrelate with one another to form policies on the latter. It

- should be noted that most ASEAN countries (except the Philippines) operated not so differently from the pre-pandemic and in the post-pandemic periods.
- 5. SEA countries with shorter and almost the same number of school calendar days as the Philippines performed exceptionally well in PISA, confirming literature that there are no established correlations between the length of school calendar and student performance.
- 6. Comparable experiences of severe atmospheric or climatic conditions within the year (e.g., typhoons, haze, flooding) propelled other SEA countries like Singapore, Malaysia, and Brunei to match school opening with the fiscal year (i.e., January school opening). Other SEA countries (e.g., Indonesia, Thailand, Vietnam, Lao, and Cambodia) chose to open in the last month of the rainy season.
- 7. In the Philippines, the education system operated differently from the prepandemic operations in the aspects of learning modality, learning expectations and competencies, and school opening. Furthermore, the Philippine school opening highly deviates from the common reasons of SEA countries (fiscal year and end month of rainy season). The Philippines opted for the August opening for internationalization purposes and pandemic adjustments.

Key Recommendations

Integrating the results of both Study 1 and Study 2, the researchers offer the following recommendations:

- 1. There is a need to revisit current and related policies on the basic education school calendar. The results of the study strongly suggest a shift from the August or September opening to the reasonable preference of the majority of key stakeholders (i.e., June opening) or to match the fiscal year parallel with many SEA countries (i.e., January opening). When deciding on the school calendar, it is imperative for policy-makers to consider multiple factors like climatic conditions and cultural practices just like what other Southeast Asian countries have explicitly done.
- 2. Regardless if the path is January or June opening, the following considerations should be observed: (1) The transition should be gradual (e.g., 2-3 years) similar to what Malaysia, Thailand, and Vietnam did; (2) The Department of Education (DepEd) should consider incorporating shorter breaks (one week after each quarter's examinations, totaling to three weeks) to compensate for the reduced school year break; (3) To prevent a shortened break between school years a situation that research literature also suggests is unfavorable for learning, DepEd may consider shortening the current school year (2023-2024) or the next school year (2024-2025) to ensure students have a break between school years.

- 3. A law that may supersede RA7797 to accommodate all school data should be created. All school data means that the new law will cover not only the school calendar, class hours, and the start of the school year but should also accommodate the following:
 - a. School opening;
 - b. Length of school year;
 - c. Class hours;
 - d. Suspension rules (include half-day suspensions);
 - e. Within school year breaks (e.g., mid-term break, mid-year break);
 - f. Modular/asynchronous modalities during the wet season; and
 - g. Modular/online synchronous sessions during extremely hot season.
- 4. The Philippines needs to create an inter-agency data and research center directly reporting to the Office of the President to provide substantive evidence-based research in the formulation of education policies such as the school calendar policies.

INTRODUCTION

Due to the Covid-19 pandemic that hit the globe in 2020, school openings in Philippine basic education schools and higher education institutions were delayed. In particular, basic education schools opened in late October 2020. Because of this delay, the opening of succeeding school years was also delayed. In SY 2021-2022, the Department of Education (DepEd) set the beginning of public schools' calendar for September 2021, while SY 2022-2023 opened in August 2022. Thus, classes ended in May or June, and breaks occurred between June to August or July to September.

According to a study by Ko et al. (2021), the Covid-19 pandemic significantly impacted schools, raising concerns among administrators, faculty, and students about online and/or distance learning. These concerns encompassed challenges in delivering quality education, uncertainties in university life, and administrative and financial obstacles in running it. The primary discussions were about delaying the academic semester and the repatriation of overseas students in response to the rapid spread of Covid-19 (Joaquin et al., 2020, October). Then, there was also the matter of college applications. The second time period witnessed increased focus on early admissions as well as management of the nationwide admissions test. Still, several universities failed to achieve the desired student enrollment. The anticipated apprehension regarding a potential insufficiency in student enrollment in the future indeed occurred (Pavlov & Katsamakas, 2021). In the Philippines, an advisory released on March 11, 2020, invoked the academic freedom of HEIs to exercise flexibility in changing the individual approved HEI academic calendar based on their contextual realities (CHED, 2020, CHED COVID-19 Advisory No. 3).

In the past, there were a lot of complaints, centered on typhoons and flooding, about class opening in June. Contact hours in the first quarter of the school year were shorter because of class suspensions. In the school year 2019-2020, public schools opened on June 3, 2019, while private schools were given the option to deviate from it. DepEd Order No. 007, s. 2019 on School Calendar for School Year 2019-2020 states that "school year 2019-2020 shall formally open on Monday, June 2, 2019, and private schools may deviate from the school calendar. However, they may not start classes earlier than the first Monday of June nor later than the last day of August", as provided in RA No. 11480, an Act amending Section 3 of RA 7797, otherwise known as "An Act to Lengthen the School Calendar from Two Hundred (200) Days to Not More Than Two Hundred Twenty (220) Class Days." There were private schools that opened classes in August 2020 but failed to complete the last quarter as face-to-face classes were suspended due to COVID-19.

This predicament was likewise encountered in other countries. In their research, Pozzobon et al. (2022) noted that at the onset of 2020, as the global Covid-19 pandemic escalated, the closure of schools was among the initial preventive measures implemented by the majority of countries. Shifting the school calendar was one of the various means launched to mitigate the impact of the pandemic on education not only in the Philippines but in most countries affected by the pandemic (Barrot et al., 2021). The reopening of schools was not uniform,

however, as their closures varied among countries, each reflecting a distinct stage of the pandemic. Consequently, schools were reopened at various times throughout 2020–2021 in countries with different income levels. The outcomes and results of school reopening were different, which made it hard to find patterns that could link the schools' reopening. A more critical question though remains—whether changing the school calendar could address the learning loss as an impact of the pandemic especially to the vulnerable student population (Jones, 2022). The changes could further point to some perennial concerns about the physical conditions of classrooms affected by the climatic conditions naturally inherent to the Philippines.

Recently, various groups have raised concerns over the unsuitability of holding classes during April and May, considered to be among the hottest months during the dry season in the country. When the country experienced a hot temperature in April 2023, DepEd reminded school heads that they could suspend face-to-face classes and shift to modular distance learning due to the extreme heat and power outages experienced in several parts of the country. This is based on DepEd Order No. 037, "Guidelines on the Cancellation or Suspension of Classes and Work in Schools in the Event of Natural Disasters, Power Outages/ Power Interruptions, and Other Calamities." In their study, Singh et al. (2019) discovered that students at all educational levels in the schools they examined were extremely dissatisfied with the current indoor thermal conditions. They expressed a preference for cooler temperatures compared to the existing indoor environment. Primary school pupils exhibited the lowest level of sensitivity towards fluctuations in external temperature. Ensuring sufficient airflow and optimal temperature conditions in classrooms has the potential to greatly enhance students' academic performance (Haverinen-Shaughnessy & Shaughnessy, 2015). Bluyssen et al. (2018) also supported the idea that there is a need for measures to enhance the acoustic, air, and temperature conditions in classrooms for children's well-being.

A Pulse Asia survey commissioned by Senator Win Gatchalian and conducted from June 19 to 23, 2023 showed that eight out of 10 Filipinos want to bring back the students' April and May summer break. Additionally, a survey by the Social Weather Stations (SWS) revealed that about nine out of 10 Filipinos favor the June to March school calendar. Related to this, House Bill 8550 (an Act mandating the return of the June-to-March school calendar, further amending Section 3 of the Republic Act No. 7797, otherwise known as "An Act to Lengthen the School Calendar From Two Hundred (200) Days to Not More Than Two Hundred Twenty (220) Class Days") was filed at the House of Representatives, seeking the revert to the June-March school year calendar. The global epidemic of 2020 will necessitate the implementation of new laws, rules, platforms, and solutions to better prepare countries, governments, and populations for future circumstances (Basilaia & Kvavadze, 2020).

OBJECTIVES OF THE STUDY

The study has two distinct but related objectives:

- 1. Describe the Filipino teachers' preference and reasons for the opening of the school year calendar in basic education; and
- 2. Compare and contrast Asian countries' basic education school calendar and their reasons for adopting their calendars.

The findings from the two studies are meant to be integrated to serve as inputs to policy recommendations on the opening of the basic education school calendar in the Philippines.

RESEARCH DESIGN AND METHODOLOGY

Study 1

To address Research Objective 1, the following methodology was carried out:

A descriptive method using online surveys was utilized. The participants were basic education teachers from the Department of Education across the regions of the country. The online survey tool has four parts: (1) demographic profile of the respondents; (2) preference of school calendar opening; (3) open-ended question on the advantages and disadvantages of their preferred school calendar opening; and (4) Likert scale statements on teachers' perceived considerations in choosing the school calendar opening. The survey tool underwent content and face validation by three experts.

The quantitative data were analyzed using descriptive statistics while the qualitative data were analyzed using inductive content analysis.

Participants of Study 1

Table 1Profile of the DepEd Teacher-Respondents (N=1,096)

Sex	Frequency	Percentage
Male	311	28.4
Female	785	71.6
Age Range		
21-30 years old	170	15.5
31-40 years old	460	57.5
41-50 years old	364	33.2
At least 51 years old	102	9.3
Level of Teaching Assignment		
Kindergarten	215	19.6

Elementary	505	46.1
Junior High School	342	31.2
Senior High School	32	2.9
Alternative Learning System	2	0.2
Years of Teaching Experience		
0-5 years	128	11.7
6-10 years	394	35.9
11-15 years	219	20.2
More than 15 years	355	32.2

In terms of sex profile, 311 (28.4%) of the teacher-respondents were males while 785 (71.6%) were females. They were distributed across age brackets: 460 (57.5%) were 31-40 years old, 364 (33.2%) were 41-50 years old, 170 (15.5%) were 21-30 years old, and 102 (9.3%) were at least 51 years old. In terms of the level of teaching assignment, there were 505 (46.1%) teachers assigned in the elementary, 342 (31.2%) in junior high school, 215 (19.6%) in kindergarten, 32 (2.9%) in senior high school, and 2 (0.2%) in the Alternative Learning System. Moreover, 355 (32.2%) teachers had 6-10 years of teaching experience; 355 (32.2%), more than 15 years of teaching experience; 219 had 11-15 years of teaching experience; and 128 (11.7) had 0-5 years of teaching experience.

Table 2Region of the DepEd Teacher-Respondents

Level	Frequency	Percentage
Region I – Ilocos Region	60	5.5
Region II – Cagayan Valley	20	1.8
Region III – Central Luzon	92	8.4
Region IV-A – CALABARZON	178	16.2
Region IV-B – MIMAROPA	38	3.5

Region V- Bicol	82	7.5
Region VI – Western Visayas	90	8.2
Region VII – Central Visayas	73	6.7
Region VIII – Eastern Visayas	61	5.6
Region IX – Zamboanga Peninsula	47	4.3
Region X – Northern Mindanao	80	7.3
Region XI – Davao Region	51	4.7
Region XII – SOCCSKSARGEN	36	3.3
Region XIII – Caraga	29	2.6
Cordillera Administrative Region (CAR)	20	1.8
National Capital Region (NCR)	139	12.7
Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)	0	0
Total	1096	100

The 1096 teachers who participated in the online survey were from 16 out of 17 regions in the Philippines. The three regions with the highest frequencies were Region IV-B MIMAROPA with 178 (16.2%) respondents, National Capital Region with 139 (12.7%) respondents, and Region III- Central Luzon with 92 (8.4%) respondents.

Study 2

To address Research Objective 2, the following methodology was adopted:

A comparative cross-sectional study with document analysis was utilized as the primary research method. The study compared and contrasted multiple cases from various Southeast Asian countries such as the Philippines, Cambodia, Indonesia, Laos, Malaysia, Myanmar,

Timor Leste, Thailand, and Vietnam, including sampled countries from the Asia-Pacific Region such as Australia, Japan, Hong Kong and Taiwan. The study focused on comparing and contrasting the basic education school calendars of the said various Asian countries and understanding the reasons behind their adoption. The focus was to gain insights into the similarities and differences among the school calendars and identify the factors that influenced their development and implementation.

Data Collection

Document Selection: The first step involved a careful selection of relevant documents. These documents included policy papers, official reports, educational guidelines, historical records, and other written materials related to the school calendars of the chosen Asian countries.

Data Extraction: After collecting the documents, the study systematically extracted data related to each country's school calendar. This data included the number of school days, start and end dates of the academic year, holiday periods, and any regional variations in the calendar. Additionally, the study extracted information on the reasons cited in the documents for adopting specific school calendars such as cultural traditions, economic considerations, educational goals, climatic factors, or policy factors.

Data Analysis

The data was carefully analyzed by identifying patterns, similarities, and differences among the school calendars and understanding the context-specific factors that influenced their adoption. The analysis involved categorizing the reasons cited in the documents and identifying any recurring themes or trends across the countries.

Comparative Approach

The study systematically compared the school calendars and reasons for adoption across the different Asian countries. By juxtaposing the data from the various documents, the study highlighted the similarities and distinctions in the school calendars as well as the varying rationales behind their establishment.

The cross-sectional nature of this study captured a snapshot of the school calendars at a particular moment in time, but it may not account for changes or developments over time. Additionally, the findings may not be generalizable to all Asian countries due to the selection of specific cases and the uniqueness of each country's context. However, the findings generated in the study provided valuable insights into the diversity of basic education school calendars in Asian countries and the reasons for their adoption, which can contribute to a deeper understanding of the educational systems in these countries and may inform policy discussions and decisions related to school calendar development and reform.

FINDINGS AND DISCUSSION

Study 1

School Calendar Opening Preference of Public School Teachers

Out of 1096 DepEd teachers who participated in the online survey, 942 (85.9%) preferred the month of June as the school calendar opening, while 154 (14.1%) preferred August.

Table 3Preference of Public School Teachers

Month	Frequency	Percentage
June	942	85.9
August	154	14.1
Total	1096	100

Preference for June School Opening

The preference of the respondents for the June opening of classes is summarized into three themes. The themes evolved from the sub-themes that are founded on the initial codes. Table 4 presents the evolution of the themes. The left column presents the codes that were used to label the constructs embedded in the verbatim samples. The middle column shows the sub-themes, while the right column presents the themes.

The first theme "school-related reasons" encapsulates the value given by the respondents as regards the conduciveness to teaching and learning based on their experiences with the June class opening. It was consistently pointed out that the opening of classes in June is more conducive to teaching and learning in consideration of the extreme summer heat of April and May. Below are the verbatim samples that support this claim.

"The performance of our learners during the summer months was poor. The results of the MPS in the quarterly exam and written works declined compared to their MPS not on summer months." (Region I, Senior High School)

"The advantage of June as the school opening is that it is more systematic to conduct activities because it is not yet rainy season." (Region II, Senior High School)

"...shortened time for class work may lead to poor student performance." (Region III, Junior High School)

Table 4Preference for June School Opening

Code	Sub-theme	Theme	
(1) better teaching-learning process; (2) conducive learning environment; (3) better academic performance; (4) less student absenteeism; (5) avoids class suspension; (6) lesser class time leads to poor academic performance	Conduciveness to teaching and Learning	School-related	
(1) not well-ventilated classrooms; (2) too hot in the classroom; (3) extreme heat inside the classroom is disadvantageous to students' learning; (4) not enough electric fans to suppress the heat; (5) students are restless	Inadequate school facilities during summer	reasons	
(1) temperature too high to bear; (2) teachers get sick; (3) students cannot concentrate; (4) extreme heat makes students sick; (5) schools revert to modular mode because students get sick; (6) teachers' blood pressure soar high because of heat	Teachers and students' health	Health-related reasons	
(1) observance of holidays;(2) fiesta celebration;(3) harvest season;(4) town festivities;(5) barangay youth activities	Cultural appropriateness		
(1) enough time to prepare finances for the next school year; (2) children can help in family business and other income- generating activities (planting, fishing, harvesting, selling goods, etc.)	Participation in income- generating activities during the summer	Family and tradition-related reasons	
(1) students can have summer vacation with their families;(2) easier for families to plan for vacation;(3) families can travel;(4) recharge energy	Family bonding time		

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"More time for learning: Starting the school year in June allows for an extra 6-8 weeks of instruction which can be used to cover more material or to provide more enrichment opportunities for students." (Region IV-A, Junior High School)

"It's been so hot from April to May that we, teachers and learners, could not focus on our lessons due to extremely hot weather... June is the best month for the opening of classes in the Philippines." (NCR, Elementary)

"I have noticed that the extreme heat due to the weather during dry season really affects the learning interest of the students." (NCR, Junior High School)

"Since we are now in a F2F setting, classes should end before summer break. The summer heat makes learning much harder. June and July can be foreseen to have the greatest number of class suspensions, though." (NCR, Junior High School)

"...to prevent class suspension...I am suggesting that the opening of classes be moved back to June." (NCR, Junior High School)

"...to minimize absenteeism of my students." (MIMAROPA, Elementary)

"Opening in June will also mean that the school year will end by March, and so there will be no classes in April and May which is the summer season, and hot weather during those months affects the teaching and learning process." (Region V, Senior High School)

"I prefer to start the class in June because of too much heat we experience during summer. I guess it is not conducive to the classroom environment." (Region X, Elementary)

"Inconvenience for teachers and learners to conduct classes during the summer season when temp is high." (Region XII, Elementary)

"Current school year coincides with the summer season; teachers and students are having hard time working in hot conditions." (NCR, Junior High School)

Another school-related reason is the inadequate school facilities during summer. It claims that the classrooms are not designed to handle extreme heat because the school facilities are inadequate. In relation to the first theme, the academic performance and teaching performance of students and teachers, respectively, are very much affected. The following verbatim samples support this claim.

"The classrooms were not designed for the summer season." (Region I, Junior High School)

"Electric fans are not enough to make the room cool and conducive for learning." (Region I, Elementary)

"One of my main reasons is our classroom is not designed to accommodate students during summer." (Region III, Junior High School)

"Electric fans in the classrooms are not enough for the cooling of the temperature." (Region III, Junior High School)

"I preferred June because school days will not fall on summer days. The classrooms in the Philippine schools are not ready for summer/hot season." (Region IV-A, Senior High School)

"June is much more favorable to the natural setting and real situation of classrooms and facilities, especially in public schools." (Region V, Junior High School)

"My pupils during summer season experienced too much heat in the classroom." (Region VI, Elementary)

"I prefer June as the opening of the school year so that classes will end in March/April. It is hard to hold classes in April and May if classes will start in August because these are the hottest months in our place. Learners are restless and inattentive because the classrooms are not well-ventilated, so learners are always asking permission to leave the room and stay outside to refresh themselves." (Region VII, Elementary)

"I remember having classes in April and May, and I couldn't stand the humidity. My class often complained about the weather and temperature inside our classroom. It seemed that the heat affected their behavior and their performance because the summer heat had melted their brain cells. By the way, our classroom is on the second floor with no electricity. The school-covered court is a few feet away from our building so technically we can see its roof. So, imagine the heat coming off from the roof and getting some of it inside our classroom. It was terrible! I could not bring our class outside because it's too risky. You see our school is surrounded by many full-grown mahogany trees, and there are a lot of matured seeds ready to fall. The covered court was already occupied by the kindergarten and Grade 1 classes. So, we stayed in our classroom and bore the heat." (Region X, Elementary)

The second theme is on health-related reasons. These are about the health and well-being of both teachers and students who are affected by extreme heat during the summer months. It was pointed out that having June as the class opening is more favorable to the health and well-being of both teachers and students. Based on the experiences of the respondents, they found April and May risky in terms of teachers and students' health because of heat exhaustion. In addition, they also mentioned that during the summer, a lot of teachers and students

get sick because of extreme heat. This leads to poor academic performance and teaching performance. Below are the verbatim samples that support this claim.

"Since April and May are summer months, students and teachers collapsed due to extreme heat." (Region III, Elementary)

"For the health welfare of teachers especially the less risk of heat waves that may cause bad health conditions specifically in public schools around the country." (Region IV-A, Elementary)

"Summer months (April and May) should not be spent in school due to extremely hot weather, and it's not good for the health of both the teachers and the students." (MIMAROPA, Junior High School)

"Summer in April and May will cause students and other education staff illness." (Region VI, Junior High School)

"I developed asthma during summer because of too much heat in April and May. I got sick for weeks because of it. I could not discuss well and give students activities because they were also having a hard time focusing due to the hot temperature." (Region VI, Junior High School)

"I experienced my BP to be high almost every day while in school due to extremely hot weather..." (Region VI, Senior High School)

"So that learners and teachers will not experience high temperatures from April to May that cause them nose bleeding, asthma attacks, and other related health problems." (Region VI, Elementary)

"April and May are very humid and may cause heat stroke among students." (Region XI, Junior High School)

The third theme, family and tradition-related reasons, is about family bonding, cultural celebrations, and finance-generating activities during the summer months. The first sub-theme is family bonding during vacation which refers to the importance of summer vacation as the time to spend with the family. The respondents claimed that summer vacation will allow them to rest well and be with their families either by staying at home or traveling. Here are some of the verbatim responses on this sub-theme.

"...the time of academic breaks also allow more time to spend with family members." (Region III, Elementary)

"To have a summer vacation with family." (Region III, Elementary)

"To enjoy the vacation of families during April and May." (Region VIII, Elementary)

"Locals can enjoy summer vacation with family especially by traveling to local spots in the Philippines. We, not just the foreigners, should enjoy our tourist spots. July and August are rainy season months that sometimes hinder one to travel by air and sea." (Region VI, Senior High School)

"We want it, the regular 2-month-vacation time. Teachers can enjoy longer vacation days and will have enough time to invigorate themselves and spend time with their family, especially in attending to their children and their home." (Region X, Junior High School)

Another sub-theme is on culture appropriateness capturing the idea that the June class opening is preferred because it allows teachers and students to participate and celebrate Philippine customary practices. Starting the class in June means that April and May are vacation time that will allow students and teachers to attend town fiestas and other festivities without worrying about school requirements. Below are some verbatim samples to support this claim.

"However, some town fiestas and the Holy Week are celebrated in June which can disrupt classes." (Region III, Junior High School)

"Because, generally, summer season in our country happens from April to May and somehow having classes during this season affects the school attendance for there are celebrations and family gatherings during this time. It affects both teachers and students." (Region IV-A, Junior High School)

"April and May are the fiesta season in the province of Bohol." (Region VII, Elementary)

"To adjust to the existing climate in our country and holidays throughout the school year." (Region VIII, Elementary)

"Teachers and learners can spend longer summer break; less overlap with holidays; and early graduation." (Region IX, Elementary)

"The month of June has fewer holidays. If it is June, the summer break will be from April to May. I can then serve the church during Flores de Mayo. Catholic learners can attend this activity too which will help shape their morality and spirituality. Moreso, Araw ng Damulog is celebrated in August and if our involvement is desired, our time for school preparation will be affected." (Region X, Elementary)

"Some of our learners cannot focus during Ramadan since it falls on summer." (Region XII, Junior High School)

The final sub-theme is about participation in income-generating activities during summer. This refers to students helping their parents during the harvest season which will augment

their finances. Moreover, it is also an opportune time to prepare financially for the opening class in June. The respondents find summer vacation a time to engage in income-generating activities.

"Because summer is harvest season, high school students are expected to be in the field to help their family or to have an extra income." (Region II, Junior High School)

"June is a month after the harvest season, and it is summer when parents who are farmers and fishermen will have enough money for school supplies for their children. The same goes with government employees." (Region III, Elementary)

"It is harvest time for them." (CAR, Junior High School)

"Filipinos are accustomed to this month as the opening of classes when parents find ways financially to save for the needs of their children like uniform, school supplies, school bags, etc." (Region V, Elementary)

Preference for August Class Opening

The preference for the class opening in August can be summarized into one theme which is school-related reasons. Table 5 shows the three sub-themes.

Table 5Preference for August Class Opening

Code	Sub-theme	Theme
(1) suspension of classes due to typhoons; (2) suspension of classes due to flooding	Less suspension of classes	_
(1) internationalization;(2) globalization;(3) to synchronize with other countries	Alignment of school calendar with international practice	School-related reasons
(1) got used to the new school calendar	Avoidance of new adjustment	-

The first sub-theme is less suspension of classes which captures the intentions of the respondents to avoid class suspensions due to heavy rain, flooding, and typhoons. They found the month of August as the best month to start the school calendar because it avoids the typhoon months of June and July. The verbatim samples below support this claim.

"...strong typhoon in June and July is more disruptive for classes." (NCR, Junior High School)

"The month of June is rainy which leads to interrupted classes. Moving the class to August is more convenient." (MIMAROPA, Junior High School)

"The most number of class suspensions happen in June and July." (NCR, elementary)

"...due to severe weather conditions, flooding and other natural catastrophes which hinder and have been reasons for the cancellation of classes in previous years. So, if classes will start in August or even September, there will be no disruption of classes." (Region VI, Junior High School)

"To avoid suspension of classes due to heavy rains during June and July." (Region VI, Elementary)

"Para sa akin, mas mabuti kung August dahil sa buwan ng Hunyo ay palaging umuulan at dito sa probinsya ng Leyte ay kalimitan ang pagbaha..." [For me, August is better because it always rains during the month of June which causes flood here in Leyte] (Region VIII, Junior High School)

"I prefer that school opening starts in August because the rainy season usually has its peak from June to July, even in August. During these months, typhoons and heavy rains affect the school days as classes are interrupted. Also, the safety of the learners and teachers is at stake especially during the typhoons." (Region VI, Junior High School)

The second theme is about the alignment of the school calendar with international practices which summarizes the perceptions of the respondents pertinent to the synchronization of the Philippine academic calendar with that of other countries. It promotes the idea that having August as the month to start the new school year promotes internationalization and globalization by being aligned with other countries' practices on school opening. The following verbatim samples support this sub-theme:

"So that it will be the same with other countries and students. It won't be hard to do an international exchange program if our country has the same school calendar." (NCR, Junior High School)

"Same schedule of school opening in other countries." (Region IX, Junior High School)

"I prefer August as the opening of the school year. We are already used to it, so we don't need to adjust. August is also the beginning of classes in other countries, so this means synchronization." (Region IX, Junior High School)

"I prefer to align the opening of classes with the international schedules to facilitate cross-border education." (Region X, Junior High School)

"To be uniform with other neighboring countries." (Region XI, Junior High School)

"To adapt to the start of classes globally since some of our students are also transferring to study abroad. It is better if we have the same school calendar with the majority of the countries." (Region XIII, Junior High School)

The last sub-theme is avoidance of new adjustment which refers to the idea that the respondents have already adjusted and accepted the August opening of classes. They said that:

"My body is already adjusted to the August school opening and during June and July, bad weather is experienced much." (CAR, Senior High School)

"Because I am already adjusted to the new school calendar. If we open in June, there will be catching up, and it will be hard for us to cope since we also have some activities which we need to do. It takes our time as a scholar." (Region VIII, Elementary)

"Naka adjust na ako sa ganitong set-up." [I am already adjusted to this kind of setup] (Region XII, Elementary)

"I prefer the month of August as the opening of classes because I'm already used to it." (Region XIII, Junior High School)

From the data, it can be drawn that public school teachers prefer June as the month for the opening of classes due to the hot weather in April and May that makes the school not conducive for teaching and learning. The school facilities are inadequate to handle summer heat which makes the teachers and students uncomfortable. The hot temperature during summer also makes teachers and children prone to illnesses. Also, the summer months are the best time for vacation where everyone can enjoy, rest, recharge, and eventually prepare for the next school year. This is also the best time for everyone to enjoy the different summer activities like family outings, holy week, fiestas, sports leagues, and summer clinics (sports and music). For those in the provinces, summer time allows children to help their parents who are farmers in harvesting. The hot temperature, possible illnesses, and different summer events may prevent students from attending classes.

On the other hand, it can be drawn from the data that the teachers' preference for the August class opening is anchored on the following reasons: not going through another adjustment as they are already used to it; fewer class suspensions due to typhoon and flooding in June and July; and alignment with international school calendar and standards.

Most of the teachers considered hot temperature, inconducive learning environment, health, and summer vacation/festivities as reasons to open classes in June which, according to them, will be more practical and beneficial to all teachers and students, including the other stakeholders.

Teachers' Considerations in Choosing the School Calendar Opening

The data shows the considerations teachers perceived as important in deciding on the school calendar opening. Both the frequency distribution and overall mean revealed that among the hypothesized factors, climate and weather conditions (3.94) and health of students (3.94) are the most important considerations as perceived by the teacher-respondents. The health of teachers (3.93), students' well-being (3.77), and teachers' well-being (3.76) were also deemed very important by the teacher-respondents.

The quantitative data implies that the teacher-respondents perceived climate and weather conditions, such as heavy rain and extreme heat, as a crucial factor to the schedule of class opening because these can pose risks to the safety of students, teachers, and other school stakeholders. The effects of high temperatures and typhoons can impact students' health and well-being, especially if schools lack proper ventilation and cooling systems during summer, and access to clean water during typhoon season. In addition, heat stress and dehydration during the summer period can affect students' ability to focus on their lessons and learn effectively and can lead to decreased productivity and effective teaching among teachers.

Evidently, teachers believed that the school calendar should also consider their professional development schedule as this is a perennial expectation among them. This includes enrollment in graduate programs and studies. Family vacations are also very important considerations because these can provide opportunities for parents and children to spend quality time together away from the demands of work and school. Aligning the school calendar with the schedule of family vacation facilitates better work-life balance among teachers and students.

Table 6Teachers' Considerations in Choosing the School Calendar Opening

	Factors	n ·	Frequency						
			Very Important	Important	Less Important	Not Important At All	Mean	Overall Interpretation	Rank
1.	Climate and Weather Conditions	1096	1043	43	8	2	3.94	Very Important	1.5
2.	Holidays	1096	722	263	91	20	3.54	Very Important	9
3.	Health of Teachers	1096	1029	59	7	1	3.93	Very Important	3
4.	Health of Students	1096	1031	60	4	1	3.94	Very Important	1.5
5.	Graduation and Transition Plans	1096	799	244	43	10	3.67	Very Important	8
6.	Cross-border Education	1096	591	354	128	23	3.38	Very Important	10
7.	Teacher's Professional Development	1096	827	224	38	7	3.71	Very Important	6
8.	Teacher's Well- Being	1096	892	156	40	8	3.76	Very Important	5
9.	Student's Well- Being	1096	902	146	41	7	3.77	Very Important	4
10.	Family Vacations	1096	838	200	45	13	3.70	Very Important	7

Average Number of Typhoons per Year

The provided data outlines the number of typhoons that occurred in each month between 2019 and 2023, as well as the average of typhoons per year for each month across these years.

Table 7Average Number of Typhoons per Year

Year	January	February	March	April	May	June	July	August	September	October	November	December
2019	1	1	1	0	0	2	2	4	4	1	4	1
2020	0	0	0	0	1	1	2	6	3	6	2	1
2021	0	1	0	1	2	0	2	3	2	2	0	1
2022	0	0	0	2	0	2	1	3	4	5	0	1
2023	0	0	0	1	1	1						
Average	0.2	0.4	0.2	0.8	0.8	1.2	1.75	4	3.25	3.5	1.5	1

Source: www.pagasa.dost.gov.ph

It is apparent from the data that August and September were the months with the highest average number of typhoons, both with an average count of 4 per year. This isn't surprising as these months are typically considered to be the peak of the typhoon season in the western Pacific. It is also notable that June and July had relatively high averages with 1.2 and 1.75 typhoons per year, respectively, indicating high typhoon activity during these months.

Table 8Comparison between two prospective scenarios for school opening

Period (10 months)	Average Number of Typhoons	Number of Definite Holidays
June to March	16.8	13
August to May	15.65	18

Conversely, the months with the lowest average number of typhoons were January, February, March, and April, with each of the months having less than 1 average number of typhoons. In addition, November and December also had low average counts of typhoons, with averages of 1.5 and 1, respectively.

From the data above, Table 8 shows the comparison between two prospective scenarios for school opening.

In many regions of the country, the period from June to March is considered the typhoon season, during which a significant number of typhoons occur. Commencing the school year during this period carries the risk of potential disruptions caused by typhoons, such as class cancellations and safety concerns for students and staff.

On the other hand, the period from August to May also falls partly within the typhoon season but extends into months with generally lower typhoon activity. Although there is still a possibility of typhoons during these months, the average number is slightly lower compared to the "June to March" period. Opting to start the school year during this period could potentially reduce the risk of typhoon-related disruptions to some extent.

Number of Public Holidays in the Philippines

The provided table presents the frequency of holidays for each month of the year. The data shows that the distribution of holidays in the Philippines shows variations throughout the year, indicating that different months have different holiday patterns.

The data also highlights variability in the distribution of holidays, with some months having a substantial number of holidays, while others have very few. Months with a relatively higher number of holidays include April (6 holidays), June (2 holidays), August (2 holidays), November (2 holidays), and December (4 holidays). These months may be associated with significant events or celebrations that lead to more holidays, such as religious festivals, national holidays, or cultural observances.

Conversely, some months have very few or no holidays. March, July, September, and October fall into this category. These months may have fewer recognized public holidays or may not be associated with specific events or celebrations. There could be seasonal trends in holiday patterns, as observed in November and December, which coincide with cultural and religious celebrations at the end of the year.

When compared, the periods of June to March (N=13) have a relatively lower number of holidays compared with August to May (N=18).

Table 9Number of Public Holidays in the Philippines

Month	Number of Holidays	Holidays Celebrated	Actual Dates of Definite Holidays
January	1	New Year's Day	January 1
February	2	EDSA People Power Revolution Anniversary	February 25
		Chinese New Year	
March	0		
April	6	Araw ng Kagitingan	April 9
		Maundy Thursday	
		Good Friday	
		Black Saturday	
		Easter Sunday	
		Eid'l Fitr	
May	1	Labor Day	May 1
June	2	Independence Day	June 12
		Eid'l Adha	
July	0		
August	2	Ninoy Aquino Day	August 21
		National Heroes Day	August 28
September	0		
October	0		
November	2	All Saint's Day	November 1
		Bonifacio Day	November 30

December	4	Feast of the Immaculate Conception of Mary	December 8
		Christmas Day	December 25
		Rizal Day	December 30
		Last Day of the Year	December 31

Study 2

This section addresses objective number 2 which is to compare and contrast Asian countries' basic education school calendar and their reasons for adopting their calendars. This includes the tables and discussion about the school data and factors affecting the school calendar of ASEAN countries in pre-pandemic (2015-2019), pandemic (2020-2022), and post-pandemic (2022 onwards). In each period, a summary of the data is presented. A comparative discussion of ASEAN countries with neighboring Asian countries in terms of factors affecting school calendar (per period: pre, during, post) is also included.

School Data and Factors Affecting School Calendar of ASEAN Countries in Pre-Pandemic (2015-2019) Table 10

Platforms for Dissemination	Social Media News Bulletins Official Announcements (Memoranda)
Policies	Local suspensions Guidelines on suspensions of classes: Depted ORDER No. 43 s. 2012 Law about school days: Republic Act No. 7797
Religious and Cultural Aspects	8 out of 17 school holidays are religiously related
Economic	Public schools in Metro Manila were forced to implement triple-class shifts due to lack of classrooms when school opened on Monday.
Climatic Conditions	Signal No. 1: Automatic cancellation for preschool and kindergarten Signal No. S. K-Junior High School classes are automatically suspended In the absence of typhoon signal warnings from PAGASA, localized cancellations or suspensions of tasses in both public and private schools and work in government offices may be implemented by local chief executives in their capacity as chairpersons of the Local Disaster Risk Reduction and Management Committee (LDRRMC).
No. of National Exams	About 3 exams in each cluster (K-3, 4-6, 7-10)
Class Time	Urban: Earliest 6 a.m. Rural: earliest 7 a.m.
Contact Hours	K-3: 3-4 hrs 4-10: 4-6 hrs SHS: 5-10 hrs
School Breaks	Sem/tri break Christmas break End of School year break
Suspensions	2015: Due to bad weather-6 days. Political events: SONA-1 day APEC-5 days 2016: due to bad weather-6 days. Events-3 days 2017: due to bad weather-6 days. Events: Transport strike-1 strike-1 strike-1 strike-1 strike-1 strike-1 strike-1 day ASEAN-2 days 2019; due to bad weather-6 days. Events: SONA-1 day. Transport Strike-1 day SEA Games-3 days Special holidays-2 days
Holidays	Approx. 17 days
School Opening	First week of June
No. Of School Days	200 to 220 class days 2017=2018: 195 class days, 180-day contact time for teachers and learners is non- negotiable
SC Data	Philippines

The Ministry of Education and Training disseminates announcements for class suspensions. Some main primary sources that students have are social media sites like Pacebook since a lot of schools post their newest into on the pages. Others, like television broadcasts, are typically slow but still useful otherwise.	
	Elementary and secondary schools generally still use the old academic year (fune to March), and some universities continue to use the ASEAN calendar (August to June).
The majority of holidays are religious-related	80% of holidays are monarchial or cultural-related. There is a faith-based curriculum and national examinations.
Pre-primary: state-run and free, but parents provide voluntary contributions as a development free, but with supplementary fees. LS and US: Secondary school education in vietnam is not completely free. Tuition fees avariaged between USD 262 and USD 385 annually in 2015/16. Secondary schools also charge a variety of supplementary free, ranging from maintenance maintenance maintenance of books and uniforms. International assochools also charge a variety of supplementary from maintenance maintenance maintenance maintenance and uniforms. International sectors have their schools have their school	Teacher shortages in some subject areas Teacher retention Children from low-income families can be admitted to Child Development Centres for as low as 30 THB (0.8 USD) adily. Lunch its provided for all the children.
Summer in North Vietnam is usually from the end of April to the end of April to the end of April bushs when students take their summer breaks. North Vietnam experiences autumn which autu	June to March but changed to an August school opening to attune to ASEAN countries The school opening was changed back to June to have the year-end break during the very hot months of April and May
About 5 exams	About 3 exams
All levels: 7 a.m. and 1 p.m.	Generally, 8 a.m.
PS: School Day; 8 a.m 12 p.m. Half Day; 8 a.m 12 p.m. Full Day; 8 a.m 4:30 p.m. P, LS, US; morning; 7 a.m 11 a.m. affernoon: 1 p.m 4 or 5 p.m.	Primary; not exceed 5 hours per day Generally almost 10 hours per day
Summer break begins on the 30% of May (the time when a school year ends), and it typically lasts until the end of August, preferably before the 5% of September (when a anew school year begins)	Midyear break, End of School Year break
Due to political tension-2-3 days The Southern part of Thailand suspends classes due to strong Typhoons-2-3 days per year Areas around Bangkok do not suspend classes due to bad weather bad weather by typhoons	Due to typhoons and flooding -3-5 days per year
Approx. 15 days	Approx. 25 days Only 5 are standard holidays; all the rest are monarchial- related holidays
September to May Summer Break: June to August [Summer Months]	SY 2015-2016: August to May 2016-2019: May/June to March
160-175 days PS and P- 175 days 35 weeks, 5 days a week for three years LS: G 6-7: 175 G 43-7: 160 days 32 weeks US: 1175 days G 19-1: 160 days 32 weeks G 175 160 days 32 weeks G 175 160 days 32 weeks G 175 160 days G 175 160 days G 18-9: 160 days	180 to 200 days PS- optional PS-1000 hrs LS-<2500 hrs US:<3600hrs
Vietnam	Thailand

Indonesia Ministry of Education, Culture, Research, and Technology (Kendikbud) website; social media (Facebook); school websites	Malaysia Ministry of Education website; social media (Facebook); school websites
Due to most Indonesians being Muslims, school hours are adjusted during Ramadhan (5 hours only).	
About 87 percent of Indonesia's population is Sunni Muslim, making the largest majority Muslim Muslim country in the world. Public holidays consider the religious and cultural observances of other ethnic and religious groups.	Malaysia is a multicultural, multicultural, multi-chinic society. The country is composed of three major ethnic groups. Indigenous Malaysians, or Bumiputera. Holidays are mostly based on the following major religions of the country: Islam, Christianity, and Hinduism.
Education in Indonesia is compulsory and provided free of charge at public schools from Grades one to mile (six years of elementary education and three years of three years of three years of education).	Malaysia performs very well with respect to access to education. Spending on education is a dequate and does not appear to be a key constraint. Expenditure on basic education is more than double that of other ASEAN countries The country provides 11 years of free primary and secondary
Cyclones occur very often in Indonesia. On average, they happen about 11 times a year. The most affected regions are Lesser Sunda Islands, Moluccas, and Sumatra	Typhoons only occur occasionally in Malaysia, on average, they happen about 3 times a greed, each, and seadh, and Scadh, and Scarawak. On haze: Forest fires in Indonesia cause transboundary haze: Malaysia, and Singapore almost every sear.
About 3 exams	Approx. about
a.m.	Preschool: 9 a.m. Primary: 7:40 a.m. Secondary: 8:20 a.m.
Kindergarten/ TK: 4.5 hours, M-F Primary/SD: 7 hours Secondary (SMP and SMA): 8 hours *early dismissal every Friday	Preschool: 6 hours PS: 7 hours S: 7 hours
2 breaks: (1) Mid-year Break, (2) End of School Year Break	(1) Semester 1 Mid-Term Break (2) Mid-Year Break (3) Semester (3) Semester Brak (4) End of School Year Break
Classes were suspended during the Southeast Asian haze in some provinces in Indonesia	School closures in September and October were prevalent during the 2015 and 2019 Southeast Asian haze
Approx. 25 days	Approx. 15 days
2nd or 3rd week of July	First week of January; ends on the last week of November or first week of December
Approx. 240 days	Not < 190 Days according to law For Secondary: min of 38 teaching weeks; 29 hours per week
Indonesia	Malaysia

Most of the amouncements relating to school activities are amounced by the schools through trackers, the school weeksite, and the Student Learning Space (SLS).	Ministry of Education and Sports and Ministry of Information and Culture
Schools would also adjust the level and a adjust the level and a nature of their activities readings, which may a change throughout the day. Loof Good/Moderate) of the day the day will avoid continue with normal activities activities will avoid outdoor physical activities that will involve a lot of energy or effort and continuous exposure for several hours; air purifiers will be turned on 201-300 (Very Unheathly) - Schools will avoid outdoor physical activities. Schools will avoid outdoor activities and indoor physical activities and indoor physical activities. School Closure will be considered when the air quality forecast for the next day is Hazardous (24-hour PSI) soll of the considered when the air quality forecast for the next day is Hazardous (34-hour will be announced at around the same time that the health advisory is released. Schools will contact parents to inform them.	∠ H ω ≥ □ ∪
Singapore is a multiracial, multicultural and multicultural society. Holidays are mostly based on the following major religions of the country. Buddhism, Islam, Christianity, and Hinduism.	Lao PDR's population is about 66% Buddhist.
Preschools are privately run. It was only in 2013 that Singapore properly and a singapore properly of the Completely free because of the Compulsory Seducation Act of 2000. Students also enjoy having an Education Act of 2000. Students also enjoy having an Edusave the government contributes funds so that they can invest in their future. Students from low-income families also receive support from the Ministry of Education.	Compulsory and free education up to 5th grade Some primary schools are considered 'incomplete' schools. Lao PDR's education budget of 14.6% falls short of the international standard of education expenditure which is 15%-20%.
Generally, schools in Singapore are not affected by inclement weather conditions as transportation and infrastructure are already fifted to accommodate such. However, Singapore experiences air pollution in the form of haze, annually, coming from the forest and peatland fires from Indonesia. As such, haze mitigation management measures were put in place for schools.	Schools are mostly affected by flooding during the monsoon season from May to September.
About 5 exams	About 3 exams
Preschool: 8 a.m. or 1 p.m PS and S: 7:30 a.m.	8-11:30 a.m. 1:30-4:00 p.m. 5-day a week
Preschool: 4 hours hours with a 30-minute break S: 8 hours for 4 days; 5 hours for 1 day	PS. 5 hours per day 45 minutes per lesson
2 Term Breaks; 1 Semestral Break; End of School Year Break	Sem break, end of school year break
Minimal (e.g., 1 day only) suspensions during the Southeast Asian Haze in 2015 and 2019	School closure due to flooding caused by heavy rainfall and water released from dams in 2018
Approx. 14 days	Approx. 8 days
First week of January; ends on the last week of November or first week of December	September to June
Should not be <200 days according to law to law	PS: Approx 165 days 33 weeks; 5 days a week, 25-26 hours of classroom instruction time
Singapore	Laos

Ministry of Education, Youth and Sports website and social media	Brunei Ministry of Education website; social media (Facebook); school websites
	Due to the Islamic nature of Brunei, school hours are adjusted during Ramandhan (earlier dismissal, shortened school hours)
Cambodia's population is mostly Buddhists. Holidays are mostly memorial and religious-related	Brunei has an Islamic heritage, and their government is ruled by the monarchy system. Holidays are mostly based on the celebrations in the Islamic celebrations pertaining to the monarchy are also observed.
Free primary and secondary education to students in public schools according to Article 68 of Cambodia's Constitution Conpulsory years	Brunei citizens receive free and compulsory education for y by years. Noncitizens have to pay for their education in Brunei.
MoFYS reduced during the early summer months when the temperatures exceed 32 C. Natural hazards are mostly flood, related occurring between July to December. The country also experiences annual flooding due to being allow-lying country with vast floodplains along the early man along the month was flooding allow-lying country with vast floodplains along the	Typhoons rarely occur in Brunei, averaging once per year only. But the country has experienced episodes of haze. Haze frequently occurs in Brunei Darussalam, occurs in Brunei Darussalam, and October when the especially between May and October when the southwesterly monsoon winds prevail. This period is the least wettest period of the atmosphere is also relatively sear, and the atmosphere is also relatively stable. The occurrences of haze in the country range from slight transient hazy conditions to severe haze episodes.
About 3 exams	About 3 exams
7 a.m 5 p.m. on a 6-day week schedule	Generally, 7:15 a.m.
Grade 1-6: approx 20 hours per week Grade 7-10: approx 23 hours a week	Preschool: 4 hours PS: 5 hours S: 5 hours
Sem break, end of school year break	2 Term Breaks; End of School Year Break
	Minimal (eg., 1 day only) suspensions during the Southeast Asian Haze in 2015 and 2019
Approx. 28 days	Approx. 13 days
October to July	First week of January; ends on the last week of November or first week of December
Approx 175 -180 days 6650 hours total instruction time from primary to primary to education (age 14)	Varies Detween 200 and 210 school days
Cambodia	Brunei

Discussion for Table 10

Table 10 presents the school data and other factors affecting the SEA countries' school calendar before the pandemic. It can be gleaned from Table 10 that the data for each of the SEA countries is within the school calendar 2015-2019. The succeeding discussion presents the analysis of each identified construct (number of school days, school opening, holidays, suspension, school breaks, class hours, class time, national exams, economic aspects, climatic conditions, cultural and religious constructs, policies, and platforms for dissemination). Discussions of the identified constructs are linked, whenever possible, to present relationships and provide venues to describe the similarities and differences of each of the SEA neighbors in attempting to craft policy recommendations for school opening in the Philippines.

Number of School Days

Three of nine SEA countries (Philippines, Indonesia, and Brunei) have more than 200 up to 240 school days. Six of nine ASEAN countries (Cambodia, Thailand, Malaysia, Singapore, Vietnam, and Laos) have less than 200 or equal to school days, with Laos, Cambodia, and Vietnam having the lowest range of school days (160 - 175 days). It may be noted that SEA countries may have variable beliefs in relation to school days which confirms literature that there is little to suggest or no direct relationship between the number of school days and student performance or student achievement (Patall, Cooper, & Allen, 2010; Walden University, 2023c). Countries may tend to adjust their school calendar if they find it fitting their respective needs and concerns, such as concurring to class or school suspensions in Indonesia and Singapore to address calamities such as annual haze outbreak, and degrading air quality affecting millions, especially students (Cheong et al., 2019). Furthermore, the literature points out that high-achieving nations such as Finland, Singapore, and China have chosen not to take the longer school days, opting instead for maximizing learning and collaboration time during traditional schedules as mandated by their respective laws (Walker, 2016). Accordingly, advocating maximized learning and collaboration time for learners means rethinking and creatively designing school schedules to address all stakeholders' needs and quality instructional time (Brown et al., 2016). Most SEA countries have a delineated range of several school days per grade level, except for the Philippines and Cambodia, which follow a standard range of school days for all grade levels.

School Opening

Four of nine SEA countries (Philippines, Thailand, Singapore, and Laos) begin their school year during the rainy season. Furthermore, their school opening month coincides with the last month of their wet or rainy season (Thailand opens in May or June, Singapore opens in January, and Laos opens in September), except for the Philippines. In the case of the Philippines, June, as the school opening month, is traditionally considered the start of the rainy season in the country. The other five countries (Vietnam, Indonesia, Malaysia, Cambodia, and Brunei) begin their school calendars during the dry season. Specifically,

Vietnam opens its schools in the autumn. School openings vary in each of the SEA countries. However, Brunei, Malaysia, Singapore, and Indonesia's school openings match the fiscal year to synchronize all financial and governance matters. As gleaned from Table 10, the country's climatic conditions often dictate school activities, including openings. Literature (Climate Change Affects School Performance in Tropical Developing Countries | EfD - Initiative, n.d.; Weinman & Weinman, 2020) claims diverse impacts of climate on school performance. Courier's (2021) and Alberto et al.'s (2021) studies found that very low and high temperatures harm students' academic performance.

Holidays

As gleaned from Table 10, three of the nine SEA countries declared more than 20 holidays, with Cambodia claiming the highest number of declared holidays. The Philippines ranked 4th in this school data, while Laos has the least number of declared holidays. It should also be noted that in eight of the nine SEA countries, most holidays are attributed to religious and cultural activities and origins. Only the Philippines declared half of its holidays culturally- and religious-related. Most SEA countries practice Islam, Buddhism, Hinduism, and Christianity. Hence, the prominence of multiculturalism in most SEA countries has influenced religious and culture-related holidays (Diverse ASEAN | About the ASEAN Region | ASEAN Investment, n.d.). Those on the maritime east side, especially the Philippines, are mainly Roman Catholic; hence, the limited religious-related declared holidays.

Suspensions

Regarding the suspension of classes, all SEA countries implement class or school suspensions due to extreme weather conditions. Indonesia, Malaysia, Singapore, and Brunei implemented school suspensions due to the ASEAN Haze. Sources identified that the primary cause of this calamity is the illegal fires in peatlands and forests on Indonesia's Sumatra island and the Indonesian part of Borneo (Jazeera, 2019; X, 2015). Such calamities cause the annual haze outbreak, degrading air quality and affecting millions, especially students (Cheong et al., 2019). The Philippines also declared suspension during volcanic activities that resulted in experiencing haze-like volcanic smog (VOG) (DOST: Smog in NCR Not Due to Taal Volcano, n.d.). At the same time, the rest of the SEA countries usually suspend their classes due to bad weather, specifically strong typhoons and flooding. This may be because there is a significant relationship between extreme temperatures and how students use their time during these periods (Courier, 2021). Alberto et al. (2021) claim that students substitute study time with leisure on extremely low and high-temperature days. In particular, college students replace study time with weather-appropriate time to respond to the unpleasant weather. They further claim that high school students reduce both class and self-study time. In addition to the causes of class suspensions, the Philippines and Vietnam also cut classes in observance of international and political events. SEA Games, ASEAN and APEC summits, and other political events such as transportation strikes are the other identified causes of class suspension in the Philippines and Vietnam.

In most SEA countries (Vietnam, Thailand, Indonesia, Malaysia, Laos, and Brunei), their respective ministries of education (through their official websites) initiate centralized information dissemination regarding school or class suspensions. These official announcements are also broadcast on social media (e.g., Facebook) for broader dissemination, which, according to literature, provide adequate, timely, and compelling information in any organization or institution's administrative program and policies (Daniel et al., 2022). Although Singapore and the Philippines also use social media for information dissemination, especially for class or school suspension, these two countries usually follow localized suspension due to the diversity of local conditions within these countries.

School Breaks and National Examinations

All SEA countries observe midyear, end-year, and Christmas breaks. However, only the Philippines observes a long Christmas break, which ranges from 10 to 12 days. Some countries have semestral or trimestral breaks (Vietnam, Malaysia, Singapore, Laos, Cambodia, and Brunei). Regarding national examinations, all SEA countries implement national examinations ranging from three to five national examinations annually. In particular, the Philippines registered about three national examinations for the three key stages (K-3, 4-6, 7-10).

Contact Hours

Regarding contact hours (actual learning time), Brunei, Cambodia, Singapore, and the Philippines provide about four hours compared to the five SEA countries that spread the school hours to six, implementing full-day sessions for the learners. The latter confirms earlier literature that preschoolers on full-day schedules have better achievement in reading and mathematics (Yan & Qi, 2005). Research in the literature supports the notion that high-quality extended-day preschool programs have significant and enduring impacts on children's learning, encompassing a wide array of benefits on knowledge and skills (Robin et al., 2006), reading proficiency (Rathbun, 2010; Reynolds et al., 2014; Thompson & Sonnenschein, 2016), socio-emotional development, math, and physical health (Reynolds et al., 2014). According to Lee et al. (2004), full-day kindergarten programs involve 32 hours per week, whereas half-day kindergarten programs only have a 16-hour per week schedule. Other researchers consider the number of hours per day and distribution of these contact hours within the day to distinguish between the full-day and half-day programs. Full-day kindergarten schedules run for four and one-half to six hours per day, five days per week (Pitch & Edwards, n.d.; Robin et al., 2006).

Almost all SEA countries implement 7 to 8 school hours for upper levels, except Cambodia and Brunei, where their school hours are at most 6 hours per day, and Thailand has about 9 and half hours of teaching per day. Philippine science high schools, however, engage students for at most 10 hours in school.

Class Time

Most (8 of 9) of the SEA countries start classes as early as 7 a.m. and as late as quarter past 8. Thailand, Malaysia, and Laos start either around eight or after eight o'clock in the morning and probably believe that this start time will be advantageous to their students, confirming the claims of Carrell, Maghakian, and West (2011) and Lee (2019) that classes that start earlier than eight in the morning perform worse than those who have a later class start time. Five other countries have class start times from 7 a.m. to 7:30 a.m. Only the Philippines has varied classes due to shifting classes in urban areas. Specifically, the first class shift in the urban area usually starts at 6 o'clock in the morning (while rural areas start their classes at 7:00 a.m.-see Table 10), the second shift starts at 10 in the morning, and the last shift starts at noon.

Economic Aspects

The economic aspects presented in Table 10 show that all SEA countries provide free basic education to a different extent. Indonesia, Cambodia, and Brunei provide five years of free and compulsory education as mandated in their respective policies. At the same time, other countries provide longer years of free and compulsory education (e.g., 13 years for the Philippines, 11 years for Malaysia, six years for Singapore, and five years for Laos). Vietnam and Thailand have different configurations, where the primary school is state-run, and parents provide contributions. The primary school in Vietnam is entirely free, but the state collects supplementary fees. Finally, lower and upper secondary schools have tuition fees besides the supplementary fees. Likewise, their international schools have their own state-regulated policies for school fees.

Based on sources, SEA countries also encounter difficulties in terms of economic aspects. Hence, alternative measures were implemented to bridge the gaps. For example, public schools in the Philippines in Metro Manila were forced to implement triple-class shifts due to a lack of classrooms when school opened on Monday (Hachero, 2022). In Thailand, shortages of teachers and teacher retention are the main issues in education related to economic aspects (Pholphirul et al., 2023). However, literature claims that this challenge in the education system is not only observed in Thailand but is a global phenomenon (Craig et al., 2023). In comparison, Lao's education budget of 14.6% falls short of the international standard of education expenditure of 15%-20%.

In summary, all school data derived from this investigation was sourced from the policies and practices of the education systems of the nine ASEAN countries. For this investigation, a comparative analysis of the school data and related constructs (e.g., climatic conditions, cultural and religious practices, economic aspects, policies, and platforms for dissemination) to school duration and school opening provides a broad glimpse of how these school data and related constructs weave and interrelate with one another to form policies on the latter.

 Table 11

 School Data and Factors Affecting School Calendar of ASEAN Countries in Pandemic (2020-2022)

Platforms for Dissemination	The resumption of classes for lGU-declared localized cancellation or suspension shall be decided by the Local Chief Executive. The resumption of classes canceled or suspended by heads of suspended by heads of schools shall be decided by the Schools shall be decided by the Schools shall be decided by the Schools bivision Superintendent, upon the recommendation of the concerned school head in coordination with the Local Government Unit. Social Media News Bulletins Official Announcements (Memoranda)
Policies	No face-to-face classes will be allowed earlier than August 24, 2020, and from then on, face-to-face courses may be conducted only in areas allowed to open physically. Implementing Guidelines on the School Calendar and Activities for School Calendar 2020-2021
Religious and Cultural Aspects	Because of the compressed school year, the Secretary is authorizing the holding of Saturday classes through the conduct of distance learning activities to be undertaken by learners, pursuant to Republic Act No. 7797. Should religious considerations prohibit these Saturday activities, they shall be undertaken on Sundays. However, teachers will not be required to report for work and engage in teachers work and engage in teachers Saturdays and Saturdays and Saturdays.
Economic	Public schools in Metro Manila were forced to implement triple-class shifts due to lack of classrooms when school opened on Monday.
Climatic Conditions	TCWS. 1: Automatic cancellation for preschool and kindergarten regardless of learning delivery modality TCWS. 2: K-Junior High School classes are automatically suspended regardless of learning delivery modality. Taching school personnel, including ALS teachers, solely handling cancelled or suspended classes are not required to suspended classes are not required to report to work, solely handling arrangement adopted by the school, in consideration of the working arrangement adopted by the school, in consideration of the work or render during make-up classes. In the absence of typhoon signal warnings from PAGASA, localized cancellations or suspensions of classes in both public and private schools and work in government offices may be implemented
No. of National Exams	Most national examinations implemented because of the pandemic and HATF rules. HEPT, NCAE, and NAT were still included in the school calendar.
Class Time	Urban: Earliest 6 a.m. 7 a.m.
Contact Hours	K-3: 3-4 hrs 4-10: 4-6 hrs SHS: 5-10 hrs
School Breaks	Sem/tri break Christmas break End of the School year break
Suspensions	SY 2020-2021 Due to typhoons and bad weather- an average of 5 Due to maintenance activities of internet providers and power outages of internet providers and power outages of an average of 5 Due to ECQ and health break-3 SY 2021-2022 due to typhoon/ inclement weather-3 health break due to typhoon/ inclement weather-3 health break due to typhoon/ inclement weather-3 so SY 2021-2022 due to typhoon/ inclement weather-3 so SY 2021-2022 due to typhoon/ inclement weather-3 sease-10 days election 2022 related activities - 10 days suspensions - inauguration of president- elect Marcos -1
Holidays	Approx. 17 days
School Opening	The official start of School Vear 2020-2021 for DepEd is on the first week of October. Some private/ catholic schools started in July.
No. Of School Days	200 to 220 days (RA 11480)
SC Data	Philippines

	The Ministry of Education and Training disseminates announcements for class suspensions. Some primary sources that students have are social media sites like Facebook since a lot of schools post their newest info on the pages. Others, like television broadcasts, are typically slow but still useful otherwise.	After being closed for three months, international schools in Thailand opened their campuses on June 15. The government announced that students can return to campus in phases. Local schools run by the Thai Ministry of
	Shiffed to online	
	A majority of holidays are religiousrelated.	80% of holidays are monarchial or cultural-related. There is a faith-based curriculum and national examinations.
	Pre-primary: state-run and free, but parents provide voluntary contributions as a development fund PS: completely free, but with supplementary fees. LS and US: Secondary school education in Victuam is not completely free. Tution fees averaged between USD 262 and USD 385 annually in 2015/16. Secondary schools also charge a variety of supplementary fees, ranging from maintenance levies for the acquisition of books and uniforms. International schools have their own	Children from low-income families can be admitted to Child Development Centres for as low as 30 THB (0.8 USD) daily. Lunch is provided for all the children.
by local chief executives in their capacity as chairpersons of the Local Disaster Risk Reduction and Management Committee (LDRRMG).	Summer in North Victuam is usually from the end of April to the end of August when students take their summer breaks. North Vietnam experiences autumn, which lasts from September to November, while the South experiences the rainy season during the same period, where typhoons mostly occur.	
	About 5 exams (shifted to online)	
	All levels: 7 a.m. and 1 p.m.	
	PS: School Day: 8 a.m 3 p.m. Half Day: Pull Day: 8 a.m 12 p.m. Pull Day: 8 a.m 4:30 p.m. P, LS, US: morning: 7 a.m 11 a.m. afternon: 1 p.m 4 or 5 p.m. (shifted to online)	
	Summer break begins on the 30th of May (the time when a school year ends), and it typically lasts until the end of August, preferably before the 5th of September (when a new school year begins).	Midyear break, End of School Year break
	one-week initial of in-person classes due for the Covid-19 outbreak. Suspensions became conditional afterward depending on the health emergency status of the areas	Class suspensions in Southerm Thailand due to Typhoons: 1-2 days In Central Bangkok, class suspensions are due to political rallies or mobs: 1-2 days (August 2021)
	Approx. 15 days	Approx. 25 days Only 5 are standard holidays, all the rest are monarchial- related holidays
	September to May Summer Break: June to August [Summer Months] (shifted to online)	The schools partially opened on July 1, 2020, to avoid of students. By August 13, 2020, all schools and universities in Thailand fully reopened for full face-to-face classes. August to April
	160-175 days PS and P. 35 weeks, 5 days a week for three years LS: Grades 6-7: 35 weeks Grades 10-11: 35 weeks US: Grades 10-11: 35 weeks (Grades 10-11: 55 weeks (Grades 10-11: 56 weeks (Grades 10-11: 57 weeks (Grades 10-11: 58 weeks (Grades 10-11: 58 weeks (Grades 10-11: 58 weeks (Grades 10-11: 59 weeks (Grades 10-11: 50 weeks (Grades 10-11: 50 weeks (Grades 10-11: 51 weeks (Grades 10-11: 52 weeks (Grades 10-11: 53 weeks (Grades 10-11: 54 weeks (Grades 10-11: 55 weeks (Grades 10-11: 56 weeks (Grades 10-11: 57 weeks	180 to 200 days PS- optional P: <1000 hrs LIS:<1200 hrs US:>3600hrs
	Vietnam	Thailand

consider the control of Approx. 28 Schools were C breaks: Same as pre-Same as		learning.	Holidays are mostly based on the following major re ligions of the country: Buddhism, Islam, Christianity, and Hinduism.	blueprint for implementing the PdPs, the government increased investment in education technology.	On haze: Forest fires In Indonesia cause trans boundary haze in Indonesia, Malaysia, and Singapore almost every year.					Schools were shut down again from November 9, 2020, until December 2020 due to the rising C ovid cases, but online classes continued		2022 to satisfy the 190 school days required by the law.		
Approx. 240 In 2020, days Closed in Old-ver a pandemic pandemic pandemic pre-pandemic very office in to online learning, a med set of curriculum on July 14 car. A pandemic pandemic pandemic pre-pandemic very office in to online learning, a med shifted of School Year to distance Break (2) End of School Year to distance Break (2) End of School Year (2) End of Year (2) End	Malaysia Ministry of Education website; social media (acebook); school websites	The government implemented the Pengajaran dan Pengajaran dan Pembelajaran di Rumah (PdPR). Under this scheme, the government created various technology-based platforms to ensure online	Malaysia is a multicultural, multicultural, multicultural, multi-ethnic society. The country is composed of three major ethnic groups. Indigenous Malaysians, or muniputera.	The Malaysian government launched the PEMAKLUMAN PELAKSANAAN PENGAJARAN DAN PEMBELAJARAN DI RUMAH (FÜPR), a comprehensive home-based learning program. In addition to launching a	Typhoons occur occasionally in Malaysia. On average, they happen about 3 times a year. The most affected regions are Sabah, Kedah, and Sarawak.	Same as pre-pandemic but was canceled in 2020 and 2021. Resumed in February 2022.	Same as pre- pandemic	Same as pre- pandemic	(1) Semester Break (2) Mid-Term Break (2) Mid-Year Break (3) Semester 2 Mid-Term Break (4) End of School Year Break Break	Schools were closed for the closed for the first two weeks of Malaysian MCO starting March 18, 2020. Resumed through home-based learning in April 2020.	Approx. 15 days	For 2020, classes started as is on January 2, 2020. For 2021, classes started on January 20, 2021 but ended on February 25,	Not <190 Days according to law For Secondary: min of 38 teaching weeks; 29 hours per	.e
Approx. 240 In 2020, Approx. 25 Schools were closed in (1) Mid-year pandemic pandemic pre-pandemic very often in conjul learning. Approx. 240 In 2020, Days opened days closed in (1) Mid-year pandemic			Public holidays consider the religious and cultural observances of other ethnic and religious groups.									partially, for face-to-face classes.		
	Indonesia Ministry of Education, Culture, Research and Technology (Kemdikbud) website; social media (Facebook) school websites	An emergency curriculum was released in mid-2020 – a slimmed-down version of the 2013 national curriculum. Schools shifted to distance and online learning.	About 87 percent of Indonesia's population is Sumi Muslim, making Indonesia the largest majority Muslim country in the	Even with the shift to online learning, a significant number of Indonesian students face the problems of not having cell phones or being unable to buy internet data plan to access the internet.	Cyclones occur very often in Indonesia. On average, they happen about 11 times a year. The most affected regions are the Lesser Sunda Islands, Moluccas, and Sumatra.	Same as pre-pandemic but was canceled in 2020 and 2021. to resume in September 2022	Same as pre- pandemic		2 breaks; (1) Mid-year Break; (2) End of School Year Break	Schools were closed in March 2020 and shifted to distance learning.	Approx. 25 days	In 2020, classes opened on July 13, 2020, for SY 2020/2021 (online modality). It was on lly in September 2021 that schools opened,	Approx. 240 days	is
·· kimf	Education we re expected to open nationwide from July 1.													

Most of the announcements relating to school activities are announced by the schools through teachers, the school website, and the Student Learning Space (SLS).	Information was delivered via social media (Facebook, WhatsApp, Twitter) Education networks, radio broadcasting, and TV Programs.
The Singapore government implemented a circuit breaker' from April 7 to May 4, 2020 (and was extended until June 1, 2020). Schools moved to Home-Based Learning.	Developed the Lao PDR Education Covid-19 Response plan The MoES issued a directive that homework will be given, and lessons will be delivered online. In rural areas, teachers were enabled to meet with very small groups of children. Lao PDR Safe School Operations Guidance
Singapore is a multiracial, multiethnic, and multicultural society. Holidays are mostly based on the following major religions of the country: Buddhism, Bladm, Christianity, and Hinduism.	Lao PDR' population is about 66% Buddhist.
The Singaporean MOE has accelerated its plans to provide every secondary student with a personal learning device.	
Generally, schools in Singapore are not affected by inclement weather conditions as transportation and infrastructure are already fitted to accommodate such. However, Singapore experiences air pollution in the form of haze, annually, coming from the forest and peatland fires from Indonesia. As such, haze mitigation management measures were put in place for schools.	Schools are mostly affected by flooding during the monsoon season from May to September.
Same as pre- pandemic but was canceled in 2020.	Same as pre- pandemic but was canceled in 2020
Same as prepandemic	8-11:30 a.m. 1:30-4:00 p.m. 5-day a week
Same as pre-	PS: 5 hours per day 45 minutes per lesson
2 Term Breaks; 1 Semestral Break; End of School Year Break	Sem break; end of school year break (shortened on 2020)
Schools were closed for face-to-face classes, but home-based learning was implemented from April 8, 2020 to June 1, 2020.	Schools were closed from March 19 to May 18, 2020. They partially opened on May 18 and were fully opened by June 2020. The school year was extended to make up for the "lost days."
Approx. 14 days	Approx. 8 days
Schools were opened as scheduled on Jamary 2, 2020. Term II opened on March On March Home-based learning was implemented sarting April 8, 2020, following Singapore's Circuit Breaker.	The school year 2020-2021 opened in September 2020.
Should not be <200 days according to the law	Approx 165 days PS: 33 weeks; 5 days a week, 25-26 hours of classroom instruction time
Singapore	Laos

Ministry of Education, Youth and Sports website and social media	Brunei Ministry of Education website; social media (Facebook); school websites
Guideline of Distance Learning Education Covid-19 Response Plan Standard Operating Procedure for reopening Schools The MoEYS T	Started homebased learning on March 30, 2020 Home learning packs (HLP) and educational programmes in collaboration with Radio with Radio with Radio with Radio with Radio with Radio provided by the government.
Cambodia's population is mostly Buddhists. Holidays are mostly memorial and religious-related.	Brunei has an Islamic heritage, and their government is ruled by the monarchy system. Holidays are mostly based on the celebrations in the Islamic calendar. Moreover, Celebrations of the standard of the standard on the standard of the standard of the standard of the monarchy are also observed.
	Telecommunications provider of Brunei and the Ministry of Education (MOE) in partnership with the Ministry of Religious Affairs (MORA) on an e-Education solution – a project that focuses on providing accessibility of learning tools for teachers to provide online classes and for students who come from who come from socio-economically challenged families and are facing limitations to attend their online classes or e-Learning.
Natural hazards are mostly flood-related occurring between July to December. The country also experiences annual flooding due to being a low-lying vith vast floodplains along the Mekong River.	Typhoons rarely occur in Brunei, averaging once per year only. But the country has experienced episodes of haze. Haze frequently occurs in Brunei occurs and October when the southwesterly monson winds prevail. This period is the least wettest period of the year and the atmosphere is also relatively stable. The occurrences of the country range from slight fransient hazy conditions to severe haze episodes.
Same as prepandemic	Same as prepared but was cancelled in 2020
7 a.m 5 p.m. on a 6-day week schedule	Same as prepandemic
Grade 1-6: approx 20 hours per week Grade 7-10: approx 23 hours a week	Same as prepandemic
Sem break, end of skhool year break	2 Term Breaks; End of School Year Break
Schools were closed from March to September 2020 and during February 2021.	Schools were closed for closed for classes but home-based learning was implemented starting March 30, 2020. Schools re-opened for in-person classes in June 2020; shifted again to online learning in August 2021, and re-opening again fully in January 2022.
Approx. 22 days	Approx. 13 days
January to November 202 Learning was done through online platforms, T'y radio, and worksheets.	January 2, 2020, but beginning March 30, 2020 (star of Term 2), home- Based learning (online) was implemented
Approx. 175- 180 days 30 hours/ week for 35 weeks	Varies between 200 and 210 school days
Cambodia	Brunei

Discussion for Table 11

Table 11 presents the school data and other factors affecting the ASEAN school calendar during the pandemic, from 2020-2022. Similar to Table 10, the succeeding discussion presents the analysis of each identified construct (number of school days, school opening, holidays, suspension, school breaks, class hours, class time, national exams, economic aspects, climatic conditions, cultural and religious constructs, policies, and platforms for dissemination).

Number of School Days

Three of nine SEA countries (Philippines, Indonesia, and Brunei) have more than 200 up to 240 school days. Six of nine ASEAN countries (Cambodia, Thailand, Malaysia, Singapore, Vietnam, and Laos) have less than 200 or equal to school days, with Laos, Cambodia, and Vietnam having the lowest range of school days (160 - 175 days). It may be noted that SEA countries may have variable beliefs in relation to school days which confirms literature that there is little to suggest or no direct relationship between the number of school days and student performance or student achievement (Patall, Cooper, & Allen, 2010; Walden University, 2023c). Countries may tend to adjust their school calendar if they find it fitting their respective needs and concerns, such as concurring to class or school suspensions in Indonesia and Singapore to address calamities such as annual haze outbreak, and degrading air quality affecting millions, especially students (Cheong et al., 2019). Furthermore, the literature points out that high-achieving nations such as Finland, Singapore, and China have chosen not to take the longer school days, opting instead for maximizing learning and collaboration time during traditional schedule (Walker, n.d.). Accordingly, advocating maximized learning and collaboration time for learners mean rethinking and creatively designing school schedules to address all stakeholders need and quality instructional time (Brown et al., 2016). Most SEA countries have a delineated range of several school days per grade level, except for the Philippines and Cambodia, which follow a standard range of school days for all grade levels.

School Opening

During the pandemic, the schedule of school opening remained the same as before the pandemic for six out of nine ASEAN countries (Vietnam, Indonesia, Malaysia, Singapore, Laos, and Brunei). Thailand delayed its school opening from June to July. Only two SEA countries (Philippines and Cambodia) had a big shift in their school calendar. The Philippines opened the school year in October instead of June while Cambodia opened in January instead of October in 2020. At the onset of the pandemic, schools shifted to online modality. Then, they gradually opened to cater to face-to-face modality.

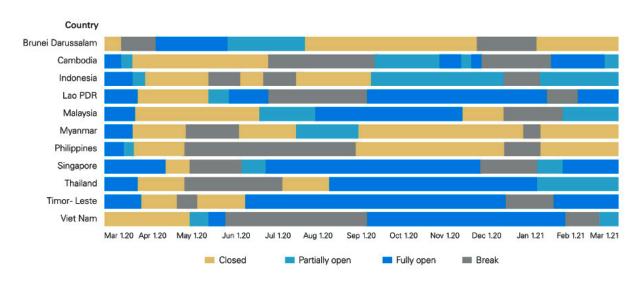
Holidays

The number of holidays for the SEA countries remained the same even during the pandemic except for Cambodia. Starting in 2020, Cambodia has reduced their holidays to 22 days following the sub-decree No. 112 SDP signed by Prime Minister Hun Sen, to boost the country's productivity and competitiveness. As gleaned from Table 11, Thailand now has the most number of holidays followed by Cambodia, while Laos remained to have the least number of holidays.

Suspensions

At the onset of the pandemic, the suspension of classes for all SEA countries implemented class or school suspensions due to Covid-19 outbreaks. Classes were then shifted online, lessening the declarations of suspension due to the outbreak. As seen from the figure below from UNICEF (2021), the Philippines was the only country that kept physical schools closed after the outbreak happened in March 2020, while schools in Myanmar partially opened in August 2020 and then closed again in September 2020 until March 2021. Singapore had the shortest period keeping their schools closed during the pandemic.

Figure 1.Months of School Closures and Reopening



Source: United Nations Children's Fund (UNICEF) and United Nations Educational, Scientific and Cultural Organization (UNESCO). (2021). Situation Analysis on the Effects of and Responses to Covid-19 on the Education Sector in Southeast Asia: Sub-regional Report

Extreme weather conditions still cause suspension in Thailand and the Philippines. Other reasons for suspending classes were political rallies or mobs in Thailand in 2021, and maintenance activities of internet providers and power outages in the Philippines.

Most SEA countries (Vietnam, Thailand, Indonesia, Malaysia, Laos, and Brunei), make use of the official websites of their respective ministries of education to initiate centralized information dissemination regarding school or class suspensions. These official announcements are also broadcast on social media (e.g., Facebook) for broader dissemination, which, according to literature, provide adequate, timely, and compelling information in any organization or institution's administrative program and policies (Daniel et al., 2022). Although Singapore and the Philippines also use social media for information dissemination, especially for class or school suspension, these two countries usually follow localized suspension due to the diversity of local conditions within these countries.

Class time, School Breaks, and National Examinations

All SEA countries still observe the same class time and the same midyear, end-year, and Christmas breaks during the pandemic. Regarding national examinations, these examinations were canceled in 2020 for almost all ASEAN countries. Vietnam was the only country that administered its national examination, which was delayed for one and a half months, amid the pandemic.

Contact Hours

All ASEAN countries maintained the same number of contact hours as before the pandemic. During the pandemic when the classes shifted online, these contact hours became the number of hours for their synchronous online instruction. This shift to online modality has significantly increased the screen time of students of all ages, especially for children under 5 years old which exceeded the recommended screen time by the World Health Organization (Choi, et al., 2023, Bergmann, et al., 2022, Dy, et al., 2023). In the Philippines, the contact hours varied depending on the learning modality implemented by the schools. The Department of Education has developed the Basic Education Learning Continuity Plan which gave schools choices of learning modalities such as modular distance learning, online distance learning or blended learning.

Table 12School Data and Factors Affecting School Calendar of ASEAN Countries in Post-Pandemic (2022-onwards)

Platforms for Dissemination	Social Media News Bulletins Official Announcements (Memoranda)
Policies	DepE d bans all schools from implementing," purely distance learning," and blended learning and blended learning and blended learning. DO_\$2022_034 Adjustments to Learning Delivery Due to Suspensions or Cancellations or Cancellations of Classes, In the event of canceled or suspended classes, modular distance learning, performance learning, performance learning, performance learning, performance usus, projects or makeup classes shall be implemented to ensure that learning competencies and objectives are still met. DepEd Order No. 14, s. 2021, learners who miss learning activities due to or bergencies due to natural or humaninduced hazards shall be accorreded the consideration in their attendance and the consideration in their attendance and the lamined face-to-Face classes: DepEd Class Schedules and Timetable for pilot Face-to-Face classes: DepEd Class Schedules and Timetable for pilot Face-to-Face Clearning Modality - TeacherPH
Religious and Cultural Aspects	8 out of 17 school holidays are religiously related.
Economic	Due to a shortage of classrooms for face-to-face-to-face learning, some schools implemented 3-shifting schedules for learners with 6 am. being the earliest shift and 9:30 p.m. being the latest end of classes every day.
Climatic Conditions	(TCWS) 1, 2, 3 4, or 5: In-person, on line classes and work from Kindergarten to Grade 12 and Alternative Learning System (ALS) are automatically canceled. Orange to Orange to Orange to on line classes and work from Kindergarten to Grade 12 and Alternative Learning System (ALS) are automatically canceled. Vellow Rain Fall: The local automatically canceled. Vellow Rain Fall: The local Chief Executive System (ALS) are automatically canceled. Vellow Rain System (ALS) are automatically canceled. Vellow Rain System (ALS) are automatically canceled. Vellow Rain (ALS) are automatically system (ALS) and Alternative lineperson, online classes and Michergarten to Grade 12 and Alternative Learning System (ALS) are automatically canceled. Power Outages/
No. of National Exams	exams exams
Class Time	Urban: Barliest 6 a.m. Rural: earliest 7 a.m.
Contact Hours	K-3: 3-4 hrs 4-10: 4-6 hrs SHS: 5-10 hrs
School Breaks	Sem/tri brak Christmas break hand of School year break
Suspensions	Average of 10 days due to typhoon or monsoon rains 3- days due to a transport atrike (March 6-8, 2022) [Edd Adha-1 day Total = 14 April-May 2023, Daptil-May 2023, Daptil-May consuppension of classes due to extreme summer weather.
Holidays	days days
School Opening	The school year shall start on the first Monday of June but not later than the last day of August: Provided, that in the event of a declaration of a state of emergency or state of calamity, the President, upon the President, upon the Secretary of Education, of Education, of Education, of Education, and set a different date for the start of the exonntry or parts thereof.
No. Of School Days	200 to 220 days
SC Data	Philippines

	The Ministry of Education and Training disseminates announcements for class suspensions. Some primary sources that students have are social media sites like Facebook since a lot of schools post their newest info on the pages. Others, pike television broadcasts, are typically slow but still useful otherwise.
	Pre-primary: The majority of free, but parents holidays are provide volumery religious-contributions as a development fund BS: completely free, but with supplementary frees, but with supplementary frees, but with supplementary frees. I.S and US: Secondary school education in Vietnam is not completely free. Truition fees averaged between S262 and USD 385 annually in 2015/16. Secondary schools also frees for the acquisition of supplementary fees, ranging from maintenance the acquisition of books and uniforms. International schools have their sown policies for fees.
ns/ ials eeir call iue	
Interruptions/ Brownouts: school officials can cancel or suspend classes at their discretion. Philippines schools can call off classes due	Summer in North Vietnam is usually from the end of April to the end of August when students take their summer breaks. North Vietnam experiences autumn which asts from September to November, while the South experiences the rainy season during the same period, where typhonos mostly occur.
	About 5 exams
	All levels: 7 a.m. and 1 p.m.
	PS: School Day: 8 am - 3 pm Half Day: 8 am - 1.2 pm Full Day: 8 am - 4:30 pm p, LS, US: morning: 7 am - 11 am afternoon: 1 pm - 4 or 5 pm
	Summer break begins on the 30th of May (the time when a school year ends) and it it ypically alsts until the end of August, preferably preferably preferably before the 5th of September (when a new school year begins).
	Indefinite suspension of in-person classes due to high risk of Covid -19 transmission- minimum of 1 week
	Approx. 15 days
	September to May Summer Break: June to August [Summer Months]
	165-180 days PS and P. 35 weeks, 5 days a week for three years LS: Grades 6-7: 35 weeks Grades 10-11: 35 weeks Grades 12: 32 weeks
	Vietnam

	Indonesia Ministry of Education, Colfure, Research, and Technology (Kemdikbud) website; scocial media (Facebook); school websites
Elementary and secondary schools generally stil use the old academic year (Iune to March), and some universities continue to use the ASEAN calendar (August to June). Students are taught a curriculum based on the "Basic Education Core Curriculum of 2008" [4] More than half of the international schools in Thailand offer the British Curriculum. The American Curriculum and International Baccalaureate Curriculum are also popular. [5] An Introduction to Education in The Sacondary and International Baccalaureate also popular. [5] An Introduction to Education in Thailand The National Education in Thailand The National Education compulsory education compulsory education compulsory education compulsory education and three years of lower secondary schooling.	With the launch of Merdeka Belajar (Emancipated Learning) in 2020, the Indonesian government plans to continue its implementation
80% of holdays are monarchial or cultural-related. There is a faith-based curriculum and national examinations.	About 87 percent of Indonesia's population is Sumi Muslim, making Indonesia the largest majority Muslim country in the world. Public consider the religious and cultural observances of other ethic and religious groups.
Mid-March to Mid-May (School Break) coincides with the hottest months and major agricultural events (planting and harvesting).	Because of the shift to distance and online learning for two years, poor learning outcomes are disproportionately experienced by children from families who have low literacy, speak local languages (rather than Bahasa Indonesia), have disabilities, or lack adequate learning facilities such as books and ICT tools.
June to March but changed to an August school opening to attune to ASEAN countries The school opening was changed back to June to have the year-end break during the very hor months of April and May.	For 2023, Indonesia, Malaysia, and Singapore may be hit in the coming months with their worst haze crisis in flaze crisis in warming ocean temperatures.
About 3 exams	Ujian Nasional (3 exams) was replaced Asesmen Nasional
Generally 8 a.m.	No changes
Primary; not exceed 5 hours per day	No Changes
Midyear break, End of School Year break	2 breaks: (1) Mid-year Break; (2) End of School Year Break
Class suspensions due to rising Cov id-19 cases:1 week (July 2022)	No suspension as of the moment but the country is bracing for the haze season due to E I N ino
Approx. 25 Odys Odys Sare standard holidays; all the rest are monarchial- related holidays	Approx. 25 days
June to March but changed to an August school opening to attume to ASEAN countries The school opening was changed back to June to have the year-end break during the very hot months of April and May.	2nd or 3rd week of July
180 to 200 days PS- optional P: <1000 hrs US:>3600 hrs US:>3600 hrs	Approx. 240-250 days
Thailand	Indonesia

Malaysia Ministry of Ministry of Seducation website; social media (Facebook); school websites	Most of the amouncements relating to school activities are amnounced by the schools through reachers, the school website, and the Student Learning Space (SLS).	Information was delivered via social media (Facebook, WhatsApp, Twitter) Education networks, radio broadcasting, and TV Programs.
The Education Ministry has agreed to Mirch the start date of Edithe schooling session we to January. This is soo possible by the school (Faguera 2026.	Singapore implemented a policy annular requiring regular relativity and reconding days and recondary and post- secondary audents. thristopies and recondary audents. The goal is to develop teal independent learning schemi	Lao PDR Safe School Info Operations Guidance was via (Fa WI) TW TW Edd Edd Edd Prop
Malaysia is a multicultural, multicultural, multi-ethnic society. The country is composed of three major ethnic groups. Indigenous Malaysians, or Bumiputera. Holdays are mostly based on the following major religions of the country: Buddhism, Islam, Christianity, and	Singapore is a multiracial, multiethnic, anultiethnic, anulticultural society. Holidays are mostly based on the following major religions of the country: Buddhism, Islam, Christianity, and	Lao PDR's population is about 66% Buddhist.
Malaysia's expenditure on bayenditure on basic education has been adequate, but the constraints remain on its institutions with the country having a highly ecentralized education.	The same economic conditions remain.	The same economic conditions remain.
For 2023: The country is expected to expected to experience weak EL Nino conditions starting September before reaching moderate intensity in the last two months of the year.	For 2023, Indonesta, Malaysia, and Singapore may be hit in coming months with their worst haze crisis in five years due to warming ocean temperatures.	Schools are mostly affected by flooding during the monsoon season from May to September.
Same as pre-pandemic	Same as pre- pandemic	Same as pre- pandemic
No changes	No changes	8-11:30 a.m. 1:30-4:00 p.m. 5-day a week
No Changes	No Changes	PS: 5 hours per day 45 minutes per lesson
(1) Tem 1 Mid-Term Break (2) Between Terms 1 and 2 (3) Between Terms 2 and 3 (4) End of School Year Break	2 Term Breaks; 1 Semestral Break; End of School Year Break	Sem break; end of school year break
No school closures in 2022 and 2023 despite the public urge due to heat wave	No suspension as of the moment but the country is bracing for the haze season due to E 1 N ino	
Approx. 15 days	Approx. 14 days	Approx. 8 days
In 2022, Malaysia moved its opening of classes to March 21, 2022 due to the adjustments in the 2021 academic year, which ended in February 2022.	First week of January; ends on the last week of Vovember of frowember December	September to June
Not <190 Days according to law For Secondary: min of 38 teaching weeks; 29 hours per week	Should not be 2200 days according to the law	Approx 165 days PS: 33 weeks; 5 days a week, 25-26 hours of classroom instruction time
Malaysia	Singapore	Laos

Ministry of Education, Youth and Sports website and social media	Brunei Ministry of Education website; social media (Facebook); school websites
Standard Operating Procedure for reopening schools	Learning Recovery Programme was launched to reduce learning loss during the pandemic.
Cambodia's population is mostly Buddhists. Holidays are mostly memorial and religious-related.	Brunei has an Islamic heritage and their government is ruled by the monarchy system. Holidays are mostly based on celebrations in the Islamic calendar. Moreover, celebrations pertaining to the monarchy are also observed.
The same economic conditions remain.	The same economic conditions remain.
Natural hazards are mostly flood-related occurring between July to December. The country also experiences amunal flooding due to being a low-lying country with vast floodplains along the Mekong River.	Brunei has been experiencing slight hazy conditions since July 25, 2023. The hazy conditions are due to the smoke haze originating from transboundary haze from neighboring countries blown in by the prevailing southwesterly winds to the Sultanate.
Same as pre- pandemic	Same as pre- pandemic
7 a.m 5 p.m on a 6-day week schedule	No changes
Grade 1-6: approx 20 hours per week Grade 7-10: approx 23 hours a week	No Changes
Sem break; end of school year break	2 Term Breaks; End of School Year Break
Schools close during flooding, but students can attend nearby schools to continue their education, MoEYS suspended the classes for almost a month (April 20. May 18, 2023) due to the country the country hosting the SEA Games	No suspension as of the moment but the country is bracing for the haze season due to E I N ino
Approx. 21 days	Approx. 13 days
January to November	First week of January; ends on the last week of November of first week of December
175-180 days 30 hours/ week for 35 weeks	Varies between 200 and 210 school days
Cambodia	Brunei

PS-Pre-school, P-Primary (1-6), LS - Lower School (7-9), Upper Secondary (10-12)

Discussion for Table 12

School data and other factors affecting Southeast Asian (SEA) schools, post-pandemic, are presented in Table 12. These data of Southeast Asian schools are within the school calendar of 2022 to present, representing a period where Covid-19 mitigations were already rolling, particularly in the form of vaccinations. It has been thought that one way to end the pandemic was through vaccinations, and as early as 2021, Covid-19 vaccines were already developed and distributed to different parts of the globe (*A Timeline of Covid-19 Vaccine Developments in 2021*, 2021). In 2022, more than 3,385,600 doses of vaccine were administered to 1,777,986 persons across the globe (*A Return to Normal Life Post-COVID*, 2022). In the Southeast Asian region, more than 50% of the population in each country has already been vaccinated in May 2022.

The discussion presents an analysis of school data constructs (number of school days, school opening, holidays, suspension, school breaks, class hours, class time, national exams, economic aspects, climatic conditions, cultural and religious constructs, policies, and platforms for dissemination) to describe the similarities and differences of selected Southeast Asian countries' school opening post-pandemic.

Number of School Days

Three of nine SEA countries (Philippines, Indonesia, and Brunei) have more than 200 up to 240 school days. Six of nine ASEAN countries (Cambodia, Thailand, Malaysia, Singapore, Vietnam, and Laos) have less than 200 or equal school days, with Laos, Cambodia, and Vietnam having the lowest range of school days (160 - 175 days). Most SEA countries have a delineated range of several school days per grade level, except for the Philippines and Cambodia, which follow a standard range of school days for all grade levels.

As noted in the previous discussions on the number of school days pre-pandemic and during the pandemic, SEA countries may have variable beliefs in relation to school days which confirms literature that there is little to suggest or no direct relationship between the number of school days and student performance or student achievement (Patall, Cooper, & Allen, 2010; Walden University, 2023c). Countries may tend to adjust their school calendar if they find it fitting their respective needs and concerns, such as concurring to class or school suspensions in Indonesia and Singapore to address hazards such as annual haze outbreaks which degrade air quality affecting millions, especially students (Cheong et. al., 2019). Emphasis is given to maximizing learning and collaboration time during traditional schedules by high-achieving nations such as Finland, Singapore, and China instead of taking longer school days (Walker, n.d.).

School Opening

Singapore, Brunei, and Cambodia are the three SEA countries that open their schools in January. Despite the school disruptions brought by the pandemic, their school opening remained the same. Such was not the case for Malaysia, which originally opened schools in January just like the three aforementioned countries. Malaysia moved its school opening in 2022 from January to March due to the adjustments in the 2021 academic year, which ended in February 2022. The climate in SEA during January is generally good with little to no rainfall, and temperatures are cooler due to the prevailing Northeast Monsoon. The rest of the SEA countries (Philippines, Vietnam, Thailand, Indonesia, and Laos) opened their schools during the wet or rainy season—June, July, August, and September—where the Southwest Monsoon is the prevailing weather system. It should be noted also that Thailand changed its school opening to August sometime before the Covid-19 pandemic happened to "attune to ASEAN countries." However, Thailand reverted it to June to have the year-end break during the very hot months of April and May.

Holidays and School Breaks

SEA countries have varying numbers of holidays as gleaned from Table 12. Thailand, Indonesia, and Cambodia have holidays over 20 days, and Laos has the least number of holidays with 8 days only. Not much has changed in the number of holidays celebrated and observed in SEA countries post-pandemic. These are all based on the religious, cultural, historical, and political practices of each country. The Philippines is an outlier in SEA for only having holidays based on the Roman Catholic calendar (e.g., observance of Holy Week and days of obligation). The rest of SEA, despite the religious and cultural differences, observe Christmas Day on December 25 as a holiday.

These holidays are also strategically placed during the school breaks in SEA countries. With most SEA countries having two breaks—one semestral/mid-year break and one end-of-school-year break—longer holidays are placed in either of the two breaks. For example, SEA countries whose schools open in January (Singapore, Brunei, and Cambodia) have the whole month of December for their school break where the Christmas holiday is also observed. Another case for this is Indonesia and Malaysia where the Islamic Eid'l Fitr holidays coincide with the end of school year break and term break, respectively. With the changes in school opening in 2022, the Philippines and Malaysia also adjusted the dates of the school breaks, but there were no major changes observed in the number of school breaks in each SEA country.

Suspensions

Before the pandemic and even today, all SEA countries implemented class or school suspensions due to extreme weather conditions that caused flooding, extreme heat, or haze (Indonesia, Malaysia, Singapore, and Brunei are mostly affected by haze). Geohazards

such as earthquakes and volcanic eruptions are also factors considered by SEA countries in implementing class suspensions (Go, 2023; Renaldi, 2022). Class suspensions due to typhoons are unique to the Philippines as it is the SEA country mostly hit by typhoons formed in the Pacific Ocean or South China Sea (Lagmay & Rodrigo, 2022). These factors greatly influence class suspensions and are mostly related to climactic conditions as the SEA region is prone to heavy rainfall due to monsoon rains, particularly in the months when Southwest Monsoon is prevailing.

Other than these natural and anthropogenic hazards, class suspensions can still be implemented because of Covid-19. Two SEA countries—Vietnam and Thailand—suspended in-person classes for one week in 2022 due to rising Covid-19 cases (*Bangkok School Suspends On-Site Classes after 910 Students Get COVID-19*, n.d.; *Hanoi Suspends In-Person Learning in 10 Districts at High Risk of COVID-19 Transmission*, 2022). Interestingly, regional events such as the Southeast Asian games are also a cause for class suspensions.

In April 2023, Cambodia's Ministry of Education announced an almost month-long "school break" to give way to the country's hosting of the 32nd SEA games (*Ministry of Education Announces School Break during the 32nd SEA Games - Khmer Times*, 2023).

All SEA countries have platforms for disseminating information on class suspensions. The traditional platforms such as the TV, radio, and print are still used. Notably, SEA countries' ministries or departments of education are utilizing social media to post announcements on class suspensions for easier dissemination. The centrality of social media use in SEA countries has been used by the government and media to its advantage in providing timely updates and announcements for class suspensions.

Class Time and Contact Hours

The same data could be observed in the number of contact hours of SEA schools before and after the height of the Covid-19 pandemic. Brunei, Cambodia, Laos, and the Philippines have contact hours not exceeding 5 hours. The latter five SEA countries are implementing full-day classes, especially at the secondary level. Kindergarten is always an exception in the number of contact hours as all SEA schools have a maximum of four hours of contact time. Full-day kindergarten schedules run for four and one-half to six hours per day, five days per week (Pitch & Edwards, n.d.; Robin et al., 2006). This confirms earlier literature that preschoolers on full-day schedules have better achievement in reading and mathematics (Yan & Qi, 2005). Research in the literature supports the notion that high-quality extended-day preschool programs have significant and enduring impacts on children's learning, encompassing a wide array of benefits on knowledge and skills (Robin et al., 2006), reading proficiency (Rathbun, 2010; Reynolds et al., 2014; Thompson & Sonnenschein, 2016), socio-emotional development, math, and physical health (Reynolds et al., 2014). According to Lee et al. (2004), full-day kindergarten programs involve 32 hours per week, whereas half-day kindergarten programs only have a 16-hour per week schedule. Other researchers consider the number of hours per day and distribution of these contact hours within the day to distinguish between the full-day

and half-day programs.

Regarding SEA schools' class time, classes generally start between 7 a.m. and 8 a.m. It is notable again that even after the height of the pandemic, the Philippines retained its earliest start of school which is 6:00 a.m. for the 'AM' shift of its public schools. Changes in actual contact hours (learning time), mostly by shortening, can be applied for unprecedented implications of disasters such as heavy rainfalls, earthquakes, and volcanic eruptions. As such, schools in the Philippines with shifting schedules may suspend the mid-day and/or afternoon shifts, and provide asynchronous activities.

Economic Aspect of the Schooling System

After the height of the pandemic, most SEA countries' experience of the 'digital divide' has been more manifested as only Singapore and Brunei were able to successfully provide online learning with minimal issues. Education issues that were already prevalent before the pandemic, such as shortage of classrooms and poor performance vis-à-vis learning outcomes, were still evident even after the height of the pandemic. The Philippines, during its reopening of schools, saw its shortage of classrooms to be higher than in the pre-pandemic period (*Philippine Classroom Shortage Rises to 159,000 – DepEd*, 2023). As a response, public schools in the Philippines were forced to implement 3 shifting schedules to accommodate all of their learners. The same is being experienced in Indonesia as the shift to distance learning for two years has resulted in poor learning outcomes because of poverty and the lack of adequate infrastructure and materials for learning. On the other hand, Malaysia has an adequate expenditure for education, but constraints remain on the implementation of programs as education remains highly centralized.

In summary, the school data derived were sourced from the various policies and practices of SEA countries. The comparative analysis of different school data and its related constructs provides a general overview of how schools in SEA operated after the height of the Covid-19 pandemic, which, in hindsight, is not so different from the pre-pandemic situation. The relation of each school's data and its related constructs were also highlighted to show their interrelatedness in terms of education.

School Data and Factors Affecting School Calendar of Sampled Countries in the Asia-Pacific Region in Post-Pandemic* Table 13

SC Data	Japan	Australia	Taiwan	Hong Kong
No of School Days	About 210 days	About 200 days	About 240 days	About 190 days
School Opening	Begins in April and ends in March and is divided into three semesters	Begins in late January or early February and ends in December	The school year in Taiwan begins in September every year and ends in June each year. Each school year consists of two semesters	Begins in August or September and ends in June or July
Holidays	Approximately 16 days	Approximately 12 days	About 15 days (including the Chinese New Year celebration)	About 15 days (including the Chinese New Year celebration)
School Breaks	Summer break - from the end of July to the end of August Winter break - from the end of December to the beginning of January Spring break - from the end of March to the beginning of April	Schedule of Term Breaks in 2016 Term 1 Holiday (Autumn) Term 2 Holiday (Winter) Term 3 Holiday (Spring) Term 4 Holiday (Christmas/NY)	Summer break - July to August Winter break - January to February Lunar break	Summer break - mid-July to August Fall break - October
Contact Hours	The elementary school day lasts from around 8:15 a.m. to 3:00 p.m., Monday through Friday. Sports clubs, even ones for elementary school, sometimes require students to show up for practice early in the morning or stay at school until 6:30 or 7:00 p.m. In junior high and high schools - there are six class periods each day, typically lasting 50 minutes for each. After classes, students clean the classrooms in shifts and then	In a typical school day, there are five to eight lessons, ranging from 40 minutes to one hour. There are two breaks in the school day – a morning tea break (recess) and a lunch break, both of which are supervised by teachers.	Students begin school around 7:30 a.m. and finish at around 5:30 p.m. Attending cram schools after school until 9:30 p.m. is common. These are specialized schools that prepare students for high school and university entrance exams. Students may spend up to 16 hours a day, seven days a week, for a full year preparing for college entrance exams. For elementary - Monday through Friday, typically from 7:30 a.m.	For primary - The school day begins at 8:00 a.m. from Monday to Friday. Students are required to be at school at least five minutes before the 8:00 a.m. registration, as the learning programmes begin at 8:05 a.m. Students may have access to the classroom from 7:30 a.m., and the school playground is supervised from 7:30 a.m. until 3:45 p.m. each day. Morning break is 9:35 – 9:55 a.m. Lunch break is from 12:10 - 1:00

	start their club activities. There are a variety of clubs such as cultural and sports ones.		through 4 p.m. (or noon on Wednesdays).	p.m. Children are required to eat lunch in their classrooms from 12:10 -12:30 p.m. after which they may join their lunch time activity from 12:30 – 1:00 p.m. The lunch time activity rota is displayed in all classrooms and also in the school office. The school day concludes at 3:15 p.m. and 1 p.m. at the end of each term 1, 2 & 3.
Class Time	For elementary - Then, they have four 45-minute periods in the morning, with three 10- to 15-minute breaks, starting the first period from 8:35 to 9:20 and then a 10-minute break from 9:20 to 9:30. After finishing the fourth period at 12:15, they have school lunch together in the homeroom. Then, they clean classrooms, corridors, and playgrounds from 1:00 to 1:20, and have a long break from 1:20 to 13:45. The fifth period starts at 13:50, and the sixth period ends at 3:45. The afternoon homeroom period lasts from 3:45 to 3:55 before a school day ends.[4] For Junior high and high schools - class starts with a morning assembly at 8:15 a.m. , first period at 8:30 a.m. , and the last period is at 2:30 p.m.	Students attend school from Monday to Friday each week, with many schools having compulsory team sports events on Saturday mornings. School hours vary slightly across Australia but are generally from 8:30 a.m. to 3:30 p.m. each school day.	around 7:30 a.m.	usually start at 8:00 a.m.
No of National Exams	About 1 exam	About 4 exams	About 3 exams	About 1 exam

Hong Kong has a humid subtropical climate typical of southern China with hot, humid summers and mild, drier winters. On average, 6 tropical cyclones are affecting Hong Kong each year.	Basic education is free and compulsory for children from primary school to upper secondary or junior high school.
Taiwan's weather is warm all year round. There is no severe cold in winter, but the weather in summer is hot and of high humidity. Typhoons occur very often in Taiwan. On average, they happen about 12 times a year	Basic education is free and compulsory for children from primary school to upper secondary or junior high school.
Australia's climate varies greatly throughout the eight states and territories; there are four seasons across most of the country and a wet and dry season in the tropical north. Australia's seasons are at opposite times to those in the northern hemisphere. December to February is summer; March to May is autumn; June to August is winter; and September to November is spring.	Basic education is free.
Japan has four distinct seasons with a climate ranging from subarctic in the north to subtropical in the south. Conditions are different between the Pacific side and the Sea of Japan side. Northern Japan has warm summers and very cold winters with heavy snow on the Sea of Japan side and in mountainous areas. Eastern Japan has hot and humid summers and cold winters with very heavy snow on the Sea of Japan side and in mountainous areas. Western Japan has very hot and humid summers (with temperatures sometimes reaching 35 oC or above) and moderately cold winters. Okinawa and Amami have a subtropical oceanic climate. These areas have hot and humid summers (with temperatures rarely reaching 35 oC or above) and mild winters. On average, Japan is visited by 17 typhoons a year. The typhoon season in the Pacific usually begins with less severe storms in April and does not end until November. The most severe typhoons usually occur in August and September.	Basic education is free.
Conditions Conditions	Economic

Religious and Cultural Aspects	School holidays are influenced by religion and culture. Emphasis is given to children and the aged. Religion once featured heavily in Japan's public sphere, with both Shintō and Buddhism each being the state religion at different points in Japanese history. However, secularism has been a prominent aspect of Japanese society since the introduction of the Constitution of Japan (1947). The secular nature of Japanese society can be seen in the demographics of religious affiliation. No single religious affiliation. No single religious traditions.	Australia is a secular country, with a high degree of religious freedom and religious diversity. Although the state and religious groups are maintained as separate entities, religious institutions continue to play a large role in Australian society. For example, many primary and secondary schools, hospitals, aged-care facilities, and charity organizations are owned and funded by religious organizations.	The three major religious traditions in Taiwan are Buddhism, Taoism, and Confucianism. However, many of the temples in Taiwan reflect a fusion of all three traditions. This is in part due to Japanese occupation, which led many Taoists to secretly worship in Buddhist temples. Contemporary Taiwan is predominantly a mixture of Buddhist and Taoist, with 93% of the population identifying with these traditions. Only 4.5% identified as Christian. Within the Taiwanese-born Australian population identified as Buddhist (22.2%). Additionally, 56.1% of the Taiwanese-born Australian population identified as not having a religion. This may be in part due to the common perspective that Taoism and Confucianism are not necessarily considered religions, but rather philosophies, ways of life, or cultural beliefs.	Hong Kong culture was born in a sophisticated fusion of East and West. It not only kept many Chinese traditions but also experienced a baptism of western culture. The population of Hong Kong is mainly composed of Cantonese, Shanghainese, British, Indians, and Jews. Cantonese is the majority, and Cantonese culture is the mainstream there. Thus, many Chinese concepts like 'family solidarity', 'family glory', 'saving face', and 'modesty' carry significant weight in Hong Kong's culture. On the other hand, many locals adopted western ways of life.
Policies	The compulsory school system in Japan consists of six years of primary school, three years of lower secondary school, and three years of upper secondary school. Children are required to attend school for a minimum of nine years: six years of primary and three years of lower secondary education.	To strengthen performance and support students from disadvantaged backgrounds and Aboriginal and Torres Strait Islander students, Australia has made investments in early childhood education and care, with a National Early Childhood Development Strategy (2009), and has defined completion	In Taiwan's current education system, students may study for up to 20 years, which includes six years of primary school education, three years of junior high school education, three years of senior high school education, four years of bachelor education, one to four years for a master's degree, and two to seven years for a doctoral degree.	Education in Hong Kong is free, and school is compulsory for between ages 6 to 15 (primary and junior secondary schools). Children in public schools in Hong Kong attend primary schools for six years, followed by three years of junior secondary education, and another three years of senior secondary education.

possibility of English as a teaching also operate in Chinese; however, usually taught in Chinese with a on in the curriculum (secondary language being integrated later school). Many private schools private international schools Classes in public schools are usually teach in English. care centers," which were jurisdiction child "kindergartens" and "child competent Education. preschool Since 2012, consisted kindergartens and In the past, of different authorities. education Preschool under Students First (2014), the Australian develop the skills of students from socio-economically disadvantaged strengthen apprenticeships to Through its schools' policy, sackgrounds.

been can receive have

and children from the age of two to pre-elementary comprehensive education system allows for a strategy that centers on children care into one administrative consolidated into preschool, and care. The combination of preschool education and prioritizes children's care centers welfare. school

better opportunities for junior education system, of which was put into effect in SY1968. In order to offer included as well, in addition The nine-year compulsory six years are for primary education and three years are for junior high school, more diverse development students, to the regular curriculum. allow education and their future Education technical education classes ф school career choices. Compulsory understand Practical students

objectives for VET and ways to

four key policy areas: 1) developing 3) expanding principals' autonomy; improving the quality of teaching; Government targets the following and 4) engaging parents and the a sound national curriculum; 2) wider community in how their school is run.

		 Senior High School Education. Senior high school education consists of three years of schooling and includes "general senior high schools," "skill- based senior high schools," "comprehensive senior high schools," and "specialty- based senior high schools." Junior College Education. Junior college education can be classified according to admission requirements into five- year junior colleges and two-year junior colleges. Five-year junior colleges admit graduates of junior high schools, whereas two-year junior colleges admit graduates of junior high schools, whereas two-year junior colleges admit graduates of junior high schools, whereas two-year junior high schools.
Platforms for Dissemination	multi-channel information school-based mobile dissemination for disaster evacuees communications application and social media	social media, internet social media

*data was captured during pre-pandemic years, the data was almost the same during the pandemic

Discussion for Table 13

Table 13 presents the school data and other factors affecting selected countries in the Asia-Pacific Region before, during, and after the pandemic. The succeeding discussion presents the analysis of each identified construct (number of school days, school opening, holidays, suspension, school breaks, class hours, class time, national exams, economic aspects, climatic conditions, cultural and religious constructs, policies, and platforms for dissemination). Discussions of the identified constructs are linked, whenever possible, to present relationships and provide venues to describe the similarities and differences of each of the sampled countries in the Asia-Pacific Region in attempting to craft policy recommendations for school opening in the Philippines.

Number of School Days

The three countries (Japan, Australia, Taiwan, and Hong Kong) have more than 200 up to 240 school days, while Hong Kong has less than 200 days. The number of school days is based on their mandate or governing laws.

School Opening

Of the four sampled countries in the Asia Pacific Region, Australia started its school year in February. At this time, the weather in Australia is warm. On the other hand, Japan starts school in April during the spring season, while Taiwan and Hong Kong begin their school in August or September when the weather is warm and generally hot and humid, respectively. The four countries start their school calendars when the season is warm.

Holidays

As shown in Table 13, only Japan has the highest number of public holidays with 16 holidays. On the other hand, Australia has around 12 public holidays, while Taiwan and Hong Kong have around 15 public holidays including the Chinese New Year celebration. It is noted that Taiwan and Hong Kong are celebrating Chinese New Year with longer days of celebration. Interestingly, the holidays of the four countries (Japan, Australia, Taiwan, and Hong Kong) are influenced by their culture, religion, and history. Japan, for instance, has a holiday devoted to children, coming of age, and respect for the aged.

School Breaks and National Examinations

Of the four sampled countries in the Asia-Pacific, Japan, Taiwan, and Hong Kong observe summer and winter or fall breaks. However, Australia observes four breaks (Autumn, Winter, Spring, and Christmas breaks). Some countries have semestral or trimestral breaks (Japan, Taiwan, and Hong. Regarding national examinations, Australia has four national examinations compared to the other three sampled countries in the Asia-Pacific with one to two national examinations annually.

Contact Hours

Regarding contact hours, Japan, Australia, Taiwan, and Hong Kong observe about six to eight hours in school with 40 to 60 minutes for each class session. It is interesting to note that Japan and Taiwan allot student activities such as cultural and sports activities, and students attend cram school after the classes.

Class Time

The four sampled countries in the Asia-Pacific begin their classes around 7:30 a.m. to past 8:00a.m. Japan, for instance, begins its school day with a morning assembly before the first-class period. Further, in Japan, elementary pupils are given the task of cleaning their classrooms, corridors, and playgrounds after their lunch period.

Economic Aspects

The economic aspects presented in Table 13 show four sampled countries in the Asia-Pacific that provide free basic education to a different extent. In Taiwan, Japan, and Hong Kong, education is compulsory for children from primary school to upper secondary or junior high school. This indicates that their respective governments support and fund their basic education system.

Policies and Platforms for Dissemination

The four sampled countries in the Asia-Pacific have implemented policies on their education system. The highlight of which is providing free basic education and compulsory education to school children. Similarly, all these four countries use social media and technology-integrated platforms in the dissemination of school-related information.

In summary, all school data derived from this investigation was sourced from the policies and practices of the education systems of the four sampled countries in the Asia-Pacific. For this investigation, a comparative analysis of the school data and related constructs (e.g., climatic conditions, cultural and religious practices, economic aspects, policies, and platforms for dissemination) to school duration and school opening provides a broad glimpse of how these school data and related constructs weave and interrelate with one another to form policies on the latter.

Summary for Study 2

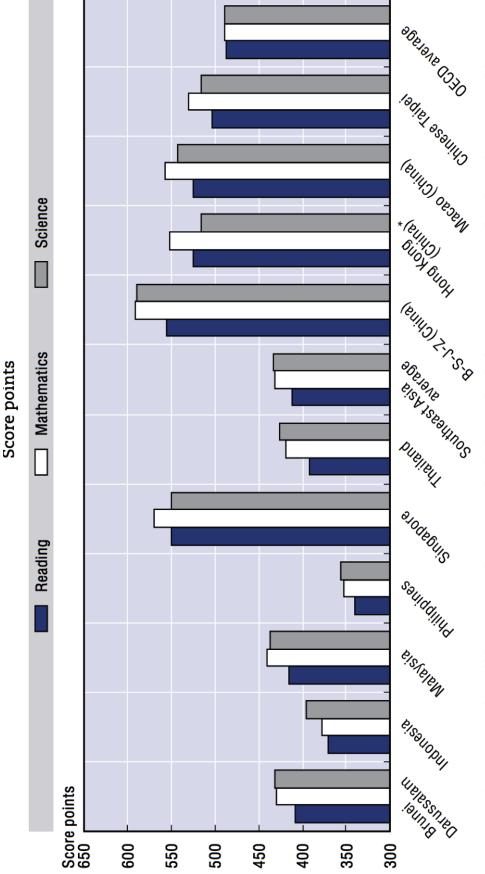
For Study 2, the researchers only used PISA as benchmark data since most ASEAN countries participated in this international large-scale assessment. In the PISA ranking within the ASEAN region, Singapore claims the highest position, with Malaysia, Brunei, and Thailand following closely behind, as reported in "Boosting Education Quality in Emerging Asia: Recommendations From Pisa 2018" (2020). Figure 1 (sourced from the latter) presents the meager performance of the Philippines in all three subjects (Math, Reading, and Science).

Comparatively, Singapore and Brunei offer almost the same length of school year as the Philippines (~ 200 days) to cover the entire curriculum but perform exceptionally well in PISA compared to the latter. Thailand and Malaysia also performed better than the Philippines, even with shorter school days (~180-190 days). These top-performing countries in the ASEAN region, although they do not experience strong typhoons (approximately one typhoon in a year only) within the school year, encounter severe haze episodes during their dry months (June to October in Singapore, Malaysia, and Thailand, and May to October in Brunei), which may cause school suspensions comparable to the suspensions incurred in the Philippines during severe typhoons, which may be experienced from June to September. Similarly, the four sampled countries in the Asia Pacific Region (Japan, Australia, Taiwan, and Hong Kong) performed excellently in PISA 2018. Despite differences in the number of school days, these countries performed well in Reading, Mathematics, and Science. Interestingly, even though countries such as Japan and Taiwan experienced typhoons, they still managed to perform well in PISA 2018. It may also be noted that these top-performing countries in PISA have different school openings. Schools in Singapore, Malaysia, and Brunei open in January to coincide with the fiscal year. Thailand chose a June school opening to coincide with the last month of the rainy season, which will end before the hottest months. Thailand's capability to refrain from having classes during the hot months is possible due to the shorter number of school days. They probably believe in the findings of most literature that there is almost no correlation between long school days and student performance (Does a Longer School Year or Longer School Day Improve Student Achievement Scores?, n.d.; Walden University, 2023). Likewise, the four top-performing countries in the Asia Pacific have different school openings. Japan, for instance, opens their school in April, while Taiwan and Hong Kong open their school in August or September performing well in PISA. These three countries are even consistently included in the Top 10 performing countries in the PISA.

In contrast, the Philippines changed its school calendar to align the academic calendar with the rest of the world, which was believed by lawmakers of the country to assist in the conduct of research between local and international universities and to help increase student participation in exchange programs, which will be beneficial to our local education system (Press Release - Chiz Wants Academic Calendar Shift in All Schools in PH, n.d.).

The SEA region is considered to be the world's most vulnerable area to climate change impacts having low-lying lands, more severe floods and droughts, booming population, and the low resilience of communities (Sentian et al., 2022). In the recent report of the Global Climate Risk Index of 2018, four SEA countries were included in the Top 10 countries most affected by extreme weather events from 1997-2016 (Top 2 – Myanmar, Top 5 – Philippines,

Figure 2
Ranking of ASEAN Countries in PISA 2018



Note: * PISA 2018 data did not meet the PISA technical standards but were accepted as largely comparable. Source: OECD, PISA 2018 Database, Tables I.B1.4, I.B1.5 and I.B1.6.

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Top 8 – Vietnam, Top 9 – Thailand). These top 10 countries greatly impacted by extreme weather events are mostly developing countries except for Thailand, which is considered an upper-middle-class country (Eckstein et al., 2018). This report is congruent with the number of class suspensions and economic conditions reported and their impact on student performance as reported in PISA 2018.

As revealed in the study that climatic conditions affect the school calendar, it is important to highlight the climate change scenarios in SEA as input to future policy changes in the number of school days, the school calendar, and other factors pertaining to student learning activities. As observed in the investigation of projected surface temperatures in the SEA region using the Global Climate Model (GCM) and Weather Research Forecast (WRF) modeling systems under RCP 4.5 and RCP 8.5 in the study of Sentian et al. (2022), there will be an increase of 0.93°C (RCP 4.5) and 2.50°C (RCP 8.5) in the mean temperature from 2013 to 2100. Figures 1 and 2 show the projected mean surface temperature of SEA from 2013 to 2100 in RCP 4.5 and RCP 8.5, respectively.

Figure 3Mean Surface Temperature of SEA Under RCP 4.5

		-	
Year	Month	Surface Temperature (°C)	Changes (°C) / (%)
2013	January	22.88	-
	July	26.66	-
2030	January	22.51	-0.37 / (-1.62)
	July	26.88	0.22 / (0.83)
2050	January	23.48	0.60 / (2.62)
	July	27.43	0.77 / (2.89)
2070	January	23.25	0.37 / (1.62)
	July	27.18	0.52 / (1.95)
2100	January	23.70	0.82 / (3.58)
	July	27.59	0.93 / (3.49)

The SEA region, according to these scenarios, will experience hotter summers which are already causing class suspensions and shorter school time as students and teachers are at risk of getting sick. Gleaning again from the data of projected mean surface temperatures, even if January is the coldest month in most SEA countries, the temperature they currently experience will be getting warmer.

Aside from surface temperature, total precipitation in SEA was also investigated in the study of Sentian et al. (2022). SEA countries like the Philippines, Vietnam, Thailand, and Cambodia experience flooding caused by heavy and non-stop rains. This is also one of the causes of in-person class suspensions. As projected by Sentian et al. (2022), the projected pattern of total precipitation in RCP 4.5 in the SEA region decreases through the end of the century, with the mid-century (2050) seen as an anomaly as precipitation increased significantly as seen in Figure 3. This projection differs from the RCP 8.5 as almost all SEA countries will be receiving a significant increment of simulated precipitation as shown in Figure 4. The study also highlighted how the Philippines will be experiencing a significant decrease in total precipitation from the start of 2013 until the end of the century (316.57 mm in 2013, 273.27 mm in mid-century, and 126.11 mm at the end of the century).

Figure 4Monthly Mean Total Precipitation of SEA Under RCP 4.5.

Year	Month	Total Precipitation (mm)	Changes (mm)
2013	January	12.57	-
	July	100.53	-
2030	January	80.30	67.72
	July	90.40	-10.12
2050	January	13.87	1.29
	July	169.94	69.40
2070	January	155.63	143.05
	July	120.23	19.69
2100	January	135.66	123.08
	July	90.76	-9.76

Figure 5Monthly Mean Total Precipitation of SEA Under RCP 8.5.

Year	Month	Total Precipitation (mm)	Changes (mm)
2013	January	92.98	-
	July	248.86	-
2030	January	169.68	76.69
	July	258.96	10.09
2050	January	84.82	84.82
	July	245.77	-3.09
2070	January	16.10	-76.87
	July	218.25	-30.61
2100	January	118.79	25.80
	July	92.42	-156.44

The significant changes in the surface temperature and total precipitation in the SEA signify the region's potential risks and vulnerabilities brought by extreme weather conditions. School data before, during, and after the height of the Covid-19 pandemic has already revealed these vulnerabilities as school suspension and changes in the learning time of students are greatly impacted by flooding brought by heavy rains, heat waves during the summer months, and haze caused by anthropogenic activities.

Figure 6Total Learning Time per Week in Regular Lessons

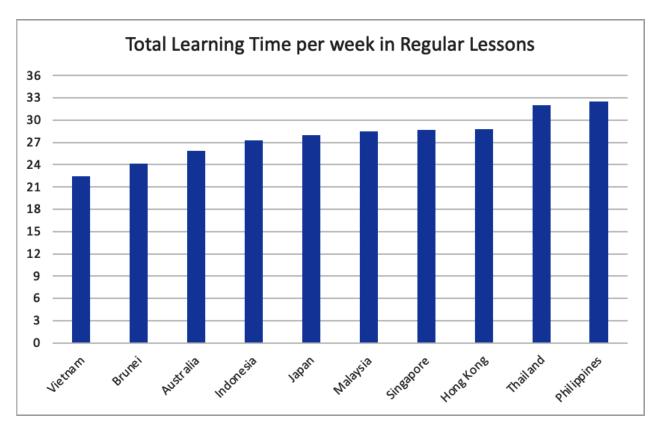


Figure: Total learning time per week of the ASEAN and its neighboring countries

Data came from OECD (2020), PISA 2018 Results (Volume V): Effective Policies, Successful Schools, PISA, OECD Publishing, Paris, https://doi.org/10.1787/ca768d40-en.

Among the different SEA countries, the Philippines has the longest learning time with 32.5 hours per week followed by Thailand with 32 hours. Vietnam has the shortest learning time with 22.4 hours per week. Japan, Malaysia, Singapore, and Hong Kong have almost the same amount of learning time per week.

SUMMARY OF RESULTS

The core findings from Study 1 and Study are provided.

- 1. Using data from an online survey of public basic education teachers (N = 1, 096) from various regions in the Philippines, the results from Study 1 show that 85.9% of the teacher-respondents prefer commencing the school year in June, while 14.15% prefer August. The foremost reasons behind the teachers favoring a June commencement of classes are *Climate and Weather Considerations* and *Health of Students*. These factors rank the highest among several criteria when selecting the month of school opening. As evident in the results of qualitative analysis, the June to March school calendar is deemed more conducive to learning compared to the August to May schedule primarily due to the elevated heat index during the final quarter of the school year. The other factors that the teacher-respondents deemed important in their preference for the opening of classes are *Health of Teachers, Student's Well-being*, and *Teacher's Well-being*.
- 2. The results of the qualitative data analysis of the responses of the teacher-respondents in the survey show that their reasons for their preference for the opening of classes are related to school, health, and family and tradition. The most typical reasons provided are related to health and school. In terms of school-related reasons, the most typical reasons provided referred to April and May being less conducive to teaching and learning. Interestingly, the teacher-respondents discussed the importance of health to both teachers and students.
- 3. Analysis of the country's trend on typhoons indicates an almost insignificant variance within the past three school years in terms of typhoons. The June to March calendar accounts for 16.8% of typhoons, whereas the August to May calendar has a share of 15.65%. Regarding public holidays, the June to March academic calendar observes fewer public holidays (13 in total) compared to the August to May schedule (18 in total).
- 4. Results for Study 2 were sourced from the policies and practices of the education systems of the nine ASEAN countries. A comparative analysis of the school data and related constructs (e.g., climatic conditions, cultural and religious practices, economic aspects, policies, and platforms for dissemination) to school duration and school opening provides a broad glimpse of how these school data and related constructs weave and interrelate with one another to form policies on the latter. It should be noted that most ASEAN countries (except the Philippines) operated not so differently from the pre-pandemic and in the post-pandemic periods.
- 5. SEA countries with shorter and almost the same number of school calendar days as the Philippines perform exceptionally well in PISA, confirming literature that there are no established correlations between the length of school calendar and

student performance.

- 6. Comparable experiences of severe atmospheric or climatic conditions within the year (e.g., typhoons, haze, flooding) propelled other SEA countries like Singapore, Malaysia, and Brunei to match school opening with the fiscal year (i.e., January school opening). Other SEA countries (i.e., Indonesia, Thailand, Vietnam, Lao, and Cambodia) chose to open in the last month of the rainy season.
- 7. In the Philippines, the education system operated differently from the prepandemic operations in the aspects of learning modality, learning expectations and competencies, and school opening. Furthermore, the Philippine school opening highly deviates from the common reasons of SEA countries (fiscal year and end month of rainy season). The Philippines opted for the August opening for internationalization purposes and pandemic adjustments.

KEY RECOMMENDATIONS

From the core findings, the following key recommendations are proposed:

- 1. There is a need to revisit current and related policies on the basic education school calendar. The results of the study strongly suggest a shift from the current August or September opening to the preference of the majority of key stakeholders (i.e., June opening) or to match the fiscal year parallel with many SEA countries (i.e., January opening). When deciding on the school calendar, it is imperative for policy-makers to consider multiple factors like climatic conditions and cultural practices just like what other Southeast Asian countries have explicitly done.
- 2. Regardless if the path is January or June opening, the following considerations should be observed: (1) The transition should be gradual (e.g., 2 years) similar to what Malaysia, Thailand, and Vietnam did; (2) DepEd should consider incorporating shorter breaks (one week after each quarter's examinations, totaling to three weeks) to compensate for the reduced school year break; (3) In order to prevent a shortened break between school years a situation that research literature also suggests is unfavorable for learning, DepEd may consider shortening the current school year (2023-2024) or the next school year (2024-2025) to ensure students have a break between school years.
- 3. Creation of a law that may supersede RA7797 to accommodate all school data. This means that the new law will cover not only the school calendar, class hours, and the start of the school year but should also accommodate the following:
 - a. School opening;
 - b. Length of school year;
 - c. Class hours;
 - d. Suspension rules (include half-day suspensions);
 - e. Within school year breaks (e.g. mid-term break, mid-year break);
 - f. Modular/asynchronous modalities during the wet season; and
 - g. Modular/online synchronous sessions during extremely hot season.
- 4. The Philippines needs to create an inter-agency data and research center directly reporting to the Office of the President to provide substantive evidence-based research in the formulation of education policies such as the school calendar policies.

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