



COVID-19: Educational Practices and Responses in Brunei Darussalam

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16.1 INTRODUCTION

Since the first recorded case of coronavirus disease 2019 (COVID-19) in Wuhan, Hubei Province, China, in December 2019, the pandemic has significantly affected many aspects of human lives, including the future and the quality of life globally, and Brunei Darussalam (henceforth referred to as Brunei) is no exception. The first recorded case of COVID-19 was reported on 9th March 2020 (Ministry of Health, Brunei Darussalam, March 9 & 10, [2020a](#), [2020b](#); Wong, Koh et al., [2020b](#)). As a result, the

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pandemic has affected the working environment and the education sector among others. All levels of education in Brunei have had to implement various distance communication and learning strategies to quickly adapt to the ‘new normal’. These are enforced as part of the delivery of formal education, amid inevitable measures of lockdown and quarantine.

The impact of COVID-19 on the education in Brunei can be illustrated with some key government decisions imposed within a few days of the first reported case of COVID-19: the announcement of temporary closures of educational institutions on 11th March (Ministry of Education, Brunei Darussalam, March 10, 2020b), the implementation of social distance learning for higher education institutions (HEIs) including Universiti Brunei Darussalam (UBD) on 12th March, the pronouncement of a national lockdown on 16th March and the recall of Bruneian students from abroad in early to mid-March. Whilst Brunei has been successful in flattening the curve, with schools due to partially re-open on 2nd June, there are still concerns among the people and the academic community on the effects of the pandemic. To date, the Brunei government, through the Ministry of Education and multi-sectoral departments, has imposed stricter rules and regulations to maintain health and safety while ensuring the efficacy of educational affairs and simultaneously establishing the new normal in educational settings.

Focusing on Brunei, this chapter reviews the state of educational affairs in all levels of education prior to and during the pandemic and at the time of this writing. Therefore, this chapter is divided into two sections: the first section examines the abrupt changes in educational policy and practices imposed by the government, schools and higher educations in the country, as well as challenges and issues raised from the sudden adjustment; and the second section looks into responses from educators at the primary, secondary and tertiary levels, reflecting on their roles in dealing with pedagogical issues and global health concerns.

16.2 EDUCATION POLICY AND PRACTICES IN BRUNEI DARUSSALAM

16.2.1 *Education System in Brunei*

The education system in Brunei and the policies governing it has evolved substantially over the last century or so. Below is an excerpt that provides a brief history of formal educational policy in Brunei:

Formal education in Brunei Darussalam began in 1912. ... The earliest draft on education policy was introduced in the First National Development Plan (1954–1959). It laid down the basic foundation for the infrastructure of Brunei’s education system. An important provision was six years of free education in Malay schools for Brunei Malay children aged 6–14 years. ... Brunei achieved full independence in January 1984. The historic event provided the impetus for the acceleration of reforms and development in all aspects of education. In an effort to streamline the Malay medium and English medium schooling systems, and to ensure that learners attain a high level of proficiency in both Malay and English, the Bilingual Education Policy was formulated in 1984 and implemented in 1985. With its implementation, all government schools followed a single system with a common national curriculum from preschool until pre-university. The policy was later extended to private schools (except International Schools) in 1992. In 1993, the 9-Year Education Policy was replaced with the 12-Year Education Policy. Every student was provided with 12 years of education: even years in preschool and primary, three years in lower secondary, and two years in upper secondary or vocational/technical education. (Ministry of Education, 2013, pp. 5–6)

The Ministry of Education in Brunei officially launched the National Education System for the 21st Century or *Sistem Pendidikan Negara Abad Ke-21* (SPN21) in January 2009. SPN21 brought about three major changes in the education system, which consisted of the education structure, curriculum and assessment, and technical education (Ministry of Education, 2013). There were several major changes conducted through various stages of implementation in the years that followed. Among the differences between the previous education system and SPN21 are the following:

- The differences in class labelling, with Primary 1 to Primary 6 now called Year 1 to Year 6, and Secondary 1 to Secondary 5 called Year 7 to Year 11;
- The introduction of Student Progress Assessment in Year 8;
- The differences in the duration of schooling from five years of secondary education (three years in lower secondary and two years in upper secondary) in the previous system, to students being channelled to either the four-year General Secondary Education Programme (Year 7 to Year 10) or the five-year General Secondary or the five-year Applied Secondary Programme (Year 7 to Year 11).

- Other programmes offered in SPN21 are the Specialised Education Programme for the gifted and talented students, and the Special Educational Needs Programme that caters to students with special educational needs.

The Ministry of Education in Brunei regulates all government and private education institutions. Meanwhile, the Ministry of Religious Affairs oversees the educational institutions that mainly provide aspects of Islamic religious education. According to the comprehensive data provided in the Brunei Darussalam Education Statistics 2018 (Ministry of Education, 2019a, 2019b), under the government sector, there are a total of 117 primary schools, 32 secondary schools, 4 sixth-form centres (pre-university), 7 vocational and technical institutions (from April 2016, referred to as the Institute of Brunei Technical Education [IBTE] Campuses), and 4 classified as higher education institutions including 1 Polytechnic, all of which are under the purview of the Ministry of Education.

The public or government primary and secondary schools in Brunei are allocated into six clusters (Table 16.1), each led by its respective cluster leader (“Government Education Institutions”, n.d.).

The clustering of schools is divided according to the four districts, namely Brunei-Muara, Tutong, Belait and Temburong. The largest concentration of primary and secondary schools in the nation can be found in the Brunei-Muara district where the capital city Bandar Seri Begawan is located. Meanwhile, there are a total of 76 private institutions in the country, of which 3 are categorised as vocational and technical institutions and 2 as higher education. As of 2018, there are 108,553 students and 10,934 teachers in the country (Ministry of Education, 2019b).

16.2.2 *Vignettes of Typical Lesson Practices*

Government primary and secondary schools in Brunei typically start at 7:00 in the morning with morning prayers, singing the national anthem and class teachers taking students’ attendance. Normal class hours resume

Table 16.1 The number of schools in each cluster

<i>School levels</i>	<i>Cluster 1</i>	<i>Cluster 2</i>	<i>Cluster 3</i>	<i>Cluster 4</i>	<i>Cluster 5</i>	<i>Cluster 6</i>	<i>Total</i>
Primary	19	20	18	20	24	16	117
Secondary	5	5	7	6	4	5	32
Pre-university	1	1	0	1	1	0	4

at 7:30 a.m. Class timetables of subjects are scheduled differently for every school. Depending on the school, students have their break time after 2 to 2.5 hours of lessons in the first part of the morning, and the end of the school day is at 12:30 in the afternoon.

Subject classes are taught either in single-period or in double-period lessons, with one period being 25 or 30 minutes. The standard class sizes in Brunei government schools range from 21 to 30 students for both primary and secondary levels, though there are times the number can be greater. Students' seating arrangements in the classroom vary from students sitting with tables arranged in rows and columns individually, in pairs or in groups of three or four. It is expected that male and female students will be seated separately in the classrooms. The whiteboards situated at the front of the class are usually the main focal point of the lesson.

In contextualising the lessons in Brunei, the classroom practices and the teaching and learning process may appear the same to the general public. However, careful observations may reveal different and distinctive depictions contributing to the uniqueness within the classroom, the students and importantly, the teacher. As the teacher walks into the classroom, the students will stand to greet the teacher with the usual Arabic and English greetings '*Assalamualaikum Warabmatullahi Wabarakatub*' (in Arabic السلام عليكم ورحمة الله وبركاته which in English is 'Peace be upon you with God's mercy and blessings'), and 'Good Morning Sir/Teacher'. This is usually followed by the Muslims reciting '*Doa*' or a short prayer, a short verse from the Quran to bless the lesson. This action is believed to make the lesson flow and knowledge imparted be retained by the students easily. Non-Muslim teachers and students remain silent out of respect. Not only is this gesture carried out at the beginning of each lesson, it is also done at the end of each lesson. These practices are normally observed at all school levels including at the post-secondary levels (pre-university and IBTE) but interestingly, not so at the higher education levels.

In relation to the teaching and learning process, teachers generally prepare a lesson plan document before the start of the lesson as reference and as per required by the school administration. The lesson plan is typically filled for a single topic that spans either a one-period lesson or at most a one-week continuous lesson. The lesson plan template document varies for each school, but the main content commonly observed is as follows:

- Statements of Learning Objectives—Identifying what the students should be able to do by the end of the lesson;
- Steps to Success (S2S)—Listing the pedagogical steps on achieving the topic of the particular lesson;
- Planning the specific learning activities—Starter and main activities;
- Plenary or Closure—Recapping or summarising the lesson and assessing students’ understanding by checking back with the lesson objective and S2S; and finally
- The Evaluation—Reflections by the teachers about their students, what went well during the lesson and suggested improvements for the next lesson.

It should be noted that some schools have gone to further lengths in specifying the different types of resources used for the lesson, the formative and summative assessments, integration with other subjects and the SPN21 skills such as critical thinking or problem solving; collaboration and cooperation; communication; creative thinking; ICT or Financial literacy; cultural and civic literacy; research; data interpretation; reading, writing, speaking and listening skills; and drawing skills.

16.2.3 *Time Spent in Teaching and Other School-Related Activities*

Teachers in schools have many responsibilities, both related and unrelated to the subject they are teaching (Hiebert et al., 2003). According to Lampert (2001), ‘[Teachers] have a limited amount of time to teach what needs to be taught, and they are interrupted often. The litany is so familiar’ (p. 1). Shahrill (2009) reported that the secondary Brunei Mathematics teachers in her study spent on average 21 hours per week on teaching and other school-related activities, such as additional administrative tasks and organising events.

Meanwhile, a nation-wide study in collaboration with the Brunei Ministry of Education that investigated the teaching of *Bahasa Melayu* (Malay Language), English Language and Mathematics in Years 4, 5 and 6 in government primary schools (Shahrill et al., 2014; Sithamparam et al., 2014; Tarasat et al., 2014; Abdullah et al., 2018) found that 20–28% of teachers spent between 41% and 50% of their time specifically teaching lessons in a typical week. The remaining time was spent working with their students during the lessons (individually or in small groups of students),

conducting administrative duties (e.g. subject coordinator, class teacher), maintaining discipline in schools, on involvement in co-curricular activities, and managing other work responsibilities such as attending professional development workshops or courses, relief teaching, work-related meetings and extra teaching duties such as enrichment and remedial classes.

16.3 COVID-19 AND CHANGES IN EDUCATIONAL PRACTICES IN BRUNEI DARUSSALAM

16.3.1 *Core Education: Primary and Secondary Education*

Upon detection of the first COVID-19 case in the country, the government of Brunei through its multi-sectoral ministries was quick to mull over and impose necessary precautions for each institution. As the most important agency in educational affairs in the country, the Ministry of Education also joined hands with other ministries and departments to come up with relevant initiatives to ensure the safety and wellbeing of the academic communities, while maintaining the functionality of academic institutions in the country.

Whilst the Ministry of Education took the first necessary step to shut down all academic institutions temporarily two days after the first confirmed case, the ministry progressively introduced a one-for-all Business Continuity Plan (BCP) through its ‘Schools Operation Protocol Matrix during COVID-19’ (Ministry of Education, 2020), which aligns with the Brunei Government Measures (Government of Brunei, 2020) undertaken in addressing the impact of COVID-19 as part of the ‘Whole of Nation Approach’ implemented by the government and supported by the people of Brunei. Based on the two main guidelines released by the Ministry of Education and the Government of Brunei respectively, this section reviews abrupt changes in educational practices and policies, which have affected several educational practices both during the height of COVID-19 and today. This review will be based on two main areas: (1) school and learning activities; and (2) the health, safety and wellbeing of academic communities.

16.3.1.1 *School and Learning Activities*

At the core level of education, throughout the first closure of schools in March and the progressive re-opening of schools over the following months, the Ministry of Education implemented de-escalation stages for primary and secondary schools. These stages brought about changes in

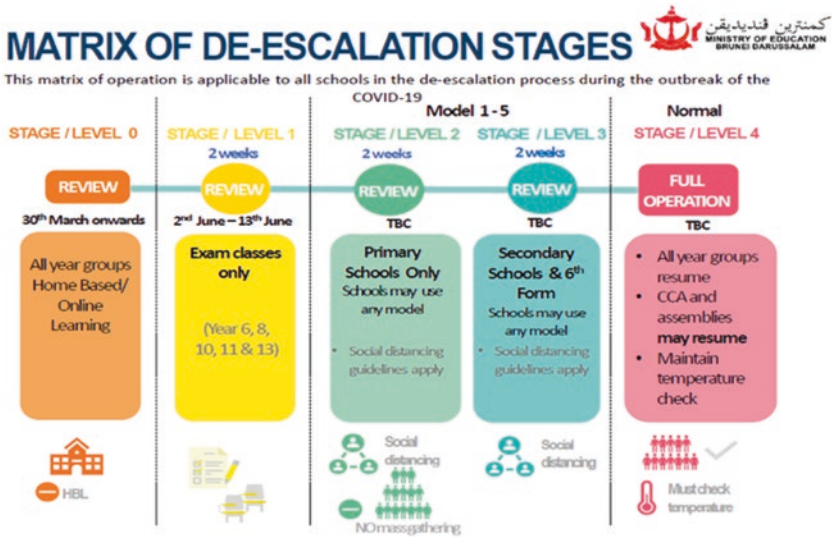


Fig. 16.1 De-escalation stages of school operation amid COVID-19 (Ministry of Education, 2020, p. 2)

pedagogical approaches, operating hours, school activities and movement that schools must follow and implement (Fig. 16.1).

As schools slowly returned to standard operation, social distancing was still mandatory at both primary and secondary schools, and schools that had small-sized classrooms were encouraged to use large spaces such as conference rooms, libraries, school halls and suraus. As part of BCP in the classroom, the ministry also urged a minimal number of students in teaching spaces, and thus schools were advised to implement a mixture of pedagogical approaches of Studying At School (SAS) and Home-Based Learning (HBL). In the case of the latter, teachers were encouraged to teach via video-conferencing, especially for students who have access to the Internet at home, while those who had limited to no Internet access were advised to undertake SAS at school with safety precautionary measures. This also meant that the number of students in each classroom was limited when compared with normal classes before COVID-19. As part of the pedagogical approach, teachers also provided Home-Learning Packs (HLP) containing subject knowledge, class and homework exercises. During the shift from face-to-face to the virtual realm, teachers opted for

virtual media, particularly Zoom and Microsoft Teams, for both teaching and learning for students and communication platforms between colleagues (Kon & Roslan, 2020).

For certain secondary schools, such as boarding schools, students were advised to stay at home while doing HBL for certain days in a week. For instance, Sports School temporarily closed their hostel and students were instructed to do HBL for five days a week. Meanwhile, Pre-Vocational and Individualised Education students were instructed to do SAS for a day and HBL for four days a week, and Remedial Education students had to do SAS for three days and HBL for two days in a week. SAS was only encouraged for subjects involving projects and practical classes, and only when it was needed. Meanwhile, as part of precautionary measures, HBL for five days for a week was also required for vulnerable students and any students who showed flu-like symptoms.

In the classroom, teachers were not allowed to stand or teach near students, conduct student group activities or even share physical study materials that were not cleaned using the proper procedures. As part of the social distancing mandate, students were not allowed to sit less than 1 metre apart. Therefore, learning activities were restricted as the movement of teachers and students and their social spaces were limited. As part of the whole school modification, the changes of educational policy and practices during the COVID-19 period also included no activities such as assemblies or mass gatherings, curricular activities, physical education, drama classes and the modification of timetables; many of these policy changes are still being practised by schools today.

As part of the government initiatives to support online learning activities and platforms in schools and the Ministry of Education's efforts, various schools received provisions of bandwidth and data to facilitate continuous learning, while the government also encouraged the public to donate new or used electronic devices for the use of academic communities. During the COVID-19 period, *Program Rancangan Pembelajaran Di Rumah* (Home-Based Learning Television Programmes) for primary school students were shown on government media, namely RTB Aneka and RTB Go. These were established to facilitate students' learning during their stay-at-home period.

16.3.1.2 Health, Safety and Wellbeing

In terms of taking care of the health, safety and wellbeing of academic communities and schools, the Ministry of Education imposed certain

restrictions and Standard Operating Procedures (SOP), which followed the Ministry of Health's guidelines, to be abided by teachers, students and parents.

For teachers:

- Teachers should be equipped with SOP and BCP as required by the government and respective schools.
- Teachers who are unwell should not come to school.
- Vulnerable teachers should only attend school for their lessons.
- Teachers should ensure social distancing with students and colleagues in classrooms and the staffroom.
- Teachers should wear facemasks at all times, especially while teaching.
- Teachers should practise personal hygiene, wash their hands regularly, and practise sneeze and cough etiquette as advised by the Ministry of Health.
- Physical Education teachers should help supervise students during recess and at the canteen.
- Teachers are to help check body temperatures for students before they enter school premises.

For students:

- Students should be equipped with necessary personal hygiene items, for example, tissue, face towel and hand sanitisers (if any) and personal drinking bottles.
- Students should practise personal hygiene, wash their hands regularly, and practise sneeze and cough etiquette as advised by the Ministry of Health.
- Students are recommended to wear facemasks at all times.
- Students who are unwell should not come to school.
- Students should minimise their movement in school, including having their food in respective classrooms (during break time).
- Students should not share personal items or food.
- Students should ensure social distancing with teachers and school-mates in classrooms and in school and should not shake/hold/touch their friend(s) hands, among others.

For parents:

- Parents should provide their child(ren) with necessary personal hygiene items, for example, tissue, face towel and hand sanitisers (if any), personal drinking bottle and pocket money with exact change.
- Parents should remind their child(ren) to not share personal items/food and to practise social distancing and personal hygiene and etiquette in school.
- Parents should not send their child(ren) to school if they are sick.
- Parents should not enter the school premises if they are sick, and are only allowed when they are not sick and have an appointment at the school.
- Parents should drop off and pick up their child(ren) at the designated area provided by the school, where one adult per family is allowed to accompany their child(ren) to avoid overcrowding.

All teachers, students and parents were encouraged to follow all the guidelines provided by the schools and the government through its multi-sectoral ministries. Throughout the process and the de-escalation stages, all government sectors were implementing the ‘Whole of Nation Approach’ where the ministries were kept informed through open channels and communication in order to succeed in combating the impact of COVID-19, while maintaining academic functionality throughout the nation. Furthermore, even though the initiative was never explicitly mentioned for or involving the academic community in Brunei, specifically for teachers, the government of Brunei also implemented continuous support of providing job security for government servants as well as individuals; thus, there were no reports of loss of jobs from COVID-19 recorded in the country.

The initiative of maintaining the wellbeing of the whole nation also came from different ministries. For instance, in line with the country upholding its national philosophy of *Melayu Islam Beraja* (Malay Islamic Monarchy), the Ministry of Religious Affairs also distributed a total of 15,000 copies of a collection of *Dhikir* (reminder) and prayer books in dealing with COVID-19 to government and private sectors throughout the nation, and a downloadable virtual book was also made available at the ministry’s official website. The Islamic effort was further bolstered by the production of a series of books entitled *COVID-19: Apa Kata Mufti* (COVID-19: What The Mufti Says) by *Jabatan Mufti Kerajaan* (The Department of Government Mufti), made available to the public, which aimed to raise awareness on the importance of Islamic faith and religion to

wellbeing in the efforts to combat the COVID-19 pandemic (Haji Yahya, 2020).

Therefore, in comparison to the pre-COVID-19 situation, the changes in educational practices is observed from the number of hours spent in teaching and learning, conducting activities to maintain the efficacy of teaching and learning, and the role of every member in the academic community. Restrictions are still present in many schools throughout the country, as schools are encouraged to minimise teachers' and students' movement while social distancing is still enforced at large today. As such, the educational practices of learning through grouping activities and hands-on experience, which follows SPN21, have been disrupted and cannot be undertaken at large. Furthermore, the roles of teachers in both primary and secondary schools have expanded beyond simply managing teaching affairs and now include taking care of the wellbeing of their students. Teachers are also often expected to come up with their own initiatives to provide the best pedagogical experience for their students, their schools and themselves. In this case, teachers have to work together with students and parents in order to follow the guidelines and the BCP implemented by the Ministry of Education. In addition, alongside the Ministry of Education's BCP, each school is encouraged to come up with their own BCP following the guidelines made by the Ministry of Education and the government of Brunei in general. This is because each school in Brunei—whether at the primary or secondary level—has their own unique academic community and environment.

16.3.2 *Higher Education*

Among the roles of the Higher Education Division at the Ministry of Education is to regulate and facilitate the governance of the six higher education institutions in the country (“Higher Education Division”, n.d.), while the Ministry of Religious Affairs oversees the Islamic Religious Teachers' Training College that was established in 1975 and upgraded to a university college in 2007. Table 16.2 lists the seven higher education institutions in Brunei and their year of establishment. Note that for Universiti Teknologi Brunei (UTB) and Kolej Universiti Perguruan Ugama Seri Begawan (KUPU SB), the year indicates the upgrading of the institutions to a university status.

The Brunei Darussalam National Accreditation Council, established in 1990 by decree of His Majesty the Sultan of Brunei Darussalam, is the

Table 16.2 The government and private higher education institutions in Brunei

<i>Higher education institution</i>	<i>Year of establishment</i>
Universiti Brunei Darussalam (UBD)	1985
Universiti Islam Sultan Sharif Ali (UNISSA)	2007
Universiti Teknologi Brunei (UTB)	2008
Politeknik Brunei (PB)	2012
Kolej Universiti Perguruan Ugama Seri Begawan (KUPU SB)	2007
Kolej International Graduate Studies (KIGS)	2002
Laksamana College of Business (LCB)	2003

only accrediting agency and quality assurance agency in the country. ‘All higher education providers conducting an accredited programme or awarding an accredited qualification or providing consultancy services on education shall comply with the Brunei Darussalam Qualification Framework’ (Ministry of Education, 2014, p. 8). The following subsections will, first, review the changes in educational practices within the higher education sector and, second, consider the approaches to teaching, learning and assessment. Both subsections focus on transpired events *during* the COVID-19 pandemic.

16.3.2.1 Changes in Educational Practices Within the Higher Education Institutions

While most higher education institutions in the country remained open and the daily operations of relevant facilities continued, all the necessary and important precautions in ensuring the health, safety and the wellbeing of students and staff were carefully monitored following the guidelines provided by the Ministry of Health in order to minimise the risks of any possible transmissions (Wong, Chaw et al., 2020a). These included temperature screening checkpoints at strategic and selected main entrances of campus buildings, mandatory social distancing practices, enforcing a strict 30-minute limit for visitors to the library and ‘Work from Home’ schedule arrangements for staff as was stipulated by the Prime Minister’s Office of Brunei (Prime Minister’s Office, 2020).

Concurrently, all institutions were informed to complete their respective BCPs, which entailed cascading the task to respective leaders of faculties, centres, departments and offices, as well as the controlled entities under its operation. The main goal in preparing such a document was to minimise any disruptions to core services due to the high probability of

the continued COVID-19 pandemic threat. What needed to be understood was the probable threat and the impact it might cause to daily operations, as well as the potential loss of man-hours, data and property. Critical staff roles and contact details were updated and compiled, and internal and external communication plans in the event of an emergency were provided. These communication plans described how officers, staff, students, parents and so on were to communicate with one another in the event of a crisis, such as the use of fax and/or email for official matters, telephone calls or instant messaging (Short Message Service or SMS) for urgent matters, and utilising WhatsApp, Skype, Zoom or other teleconferencing applications for group discussions.

For higher education institutions, there were many essential functions that needed to be identified for the BCP in relation to its risk, impact, recovery time, details of activities and the mitigation or prevention strategies. The main core business of any education provider is the teaching and learning delivery and other student-related services. It was important to identify how the closure of classes, libraries and teaching facilities could jeopardise students' academic and practical activities such as classroom and laboratory learning, clinical or industrial practices, assessment or examinations, and the impending students' graduation. The mitigation strategies given included alternative modes of teaching using online platforms; accessing library services remotely; postponing any scheduled seminars, forums and conferences; changing the assessment mode to 100% coursework; and allocating examined courses with a high number of students into smaller groups across several examination venues.

16.3.2.2 Teaching, Learning and Assessment Approaches

In following through with the BCP and in anticipation of any possibilities of pending risks, all higher education institutions revised their teaching, learning and assessment approaches to delivery using online media. From the available information gathered via the institutions' respective websites, social media pages and press releases in the national newspapers, we learned that after the first case was reported on 9 March 2020, adjusting to such approaches took between three days to about three weeks. A summary of the changes for each institution is given in Table 16.3.

For UBD in particular, online learning had begun several years prior and thus transitioning lectures and tutorials to online platforms was relatively smooth. Additionally, academics whose modules had examination components were given the option to convert their modules to 100% coursework.

Table 16.3 Summary of teaching, learning and assessment approaches during the pandemic (Taken and adapted from Shahrill & Hardaker, [in press](#))

<i>HEI</i>	<i>Teaching, learning and assessment modes</i>	<i>Start date in 2020</i>
UBD	<ul style="list-style-type: none"> • Online via Canvas • Options given for modules to be converted to 100% coursework • Online examinations 	12th March
UNISSA	<ul style="list-style-type: none"> • Online via Learning Management System (LMS) and other Teaching and Learning technology • Studies on campus deferred from 14th March to 28th March 	13th March
UTB	<ul style="list-style-type: none"> • Online Teaching using Online Education Platforms (OEP) and other non-face-to-face delivery methods of teaching and learning • No on-campus examination • All assessments converted to 100% coursework 	16th March
PB	<ul style="list-style-type: none"> • Online using LMS 	11th March
KUPU	<ul style="list-style-type: none"> • School facilities closed 	22nd March
SB	<ul style="list-style-type: none"> • Online programme 	
KIGS	<ul style="list-style-type: none"> • Online classes using the Microsoft Team apps 	28th March
LCB	<ul style="list-style-type: none"> • Online classes 	Date in March not specified

This in turn often necessitated modifying existing coursework assignments and immediately restructuring and replanning due dates (Shahrill et al., 2020; “UBD in the COVID-19 Pandemic”, 2020; Tong & Daud, 2020). Although conducting online examinations came with its own set of logistical challenges and concerns—such as preventing cheating (Boitshwarelo et al., 2017), plagiarism, academic misconduct and absenteeism (Day et al., 2020; Khan & Khan, 2019)—the relevant offices were well prepared with the option of open or closed book examinations and clear available guidelines for all such circumstances conveyed in advance to all academic staff and students of the university (Shahrill et al., [in press](#); Tuah & Naing, 2020).

16.4 STUDENT TEACHER RESPONSES TOWARDS CHANGES IN EDUCATIONAL PRACTICES

The Sultan Hassanal Bolkhiah Institute of Education (SHBIE), a graduate faculty of education in UBD, offers an initial teacher preparation programme called the Master of Teaching or MTeach for short. A

three-semester programme provides professional training on a full-time basis to graduates who have chosen to become qualified teachers, while a four-semester programme is offered to part-time students who are categorised as Work-Based. There were 93 students in the first semester of the January 2020 Intake. The MTeach timetabling is not like other programmes or modules in UBD such that students attend classes intensively every workday for two weeks in Weeks 2 and 3, and the whole of each Saturday is blocked for core and option modules including the learning area modules starting in Week 1, and subsequently from Week 4 to Week 14. On 12th March 2020, UBD announced that all lectures and tutorials were to be delivered online (Shahrill et al., *in press*; Tong & Daud, 2020; “UBD in the COVID-19 Pandemic”, 2020), and the university was already in Week 9 of a 14-week semester. By this time, most of the MTeach lectures, typically delivered via face-to-face sessions, were mostly completed. The remaining classes moved online and were used for assignment presentations by students using platforms such as Canvas, Zoom and Microsoft Teams.

However, challenges arose for the MTeach school practicum sessions. As part of the core requirements of the MTeach programme, all students are placed in schools and institutions around the country for their school placements starting in Week 4 until Week 14 from Monday to Thursday. Experienced teachers within the school, in collaboration with MTeach Clinical Specialists, will mentor each student during the placement. On 25 March 2020, five days before the second school term were due to resume, the Ministry of Education announced that all teaching and learning sessions in all schools under its purview, as well as under the purview of the Ministry of Religious Affairs, were to be conducted online (Ministry of Education, Brunei Darussalam, March 25, 2020b). A press release made by the Programme Leader of School Partnership in SHBIE quickly followed the next day stating that MTeach school placements at the students’ respective schools would end early on 30 March 2020, with the exception of one MTeach student enrolment mode, specifically the students under the *Program Perantis* or Apprentice Programme. This was the start of Week 12 with three weeks remaining for school placements. In order to compensate for the three-week shortage in placements, assessment methods were revised: (1) Students would create one online material for submission to a Clinical Specialist and present it (via online modes) during the final seminar session as additional to the last topic and (2) the five seminar

sessions by the Clinical Specialist would take place as usual but be conducted synchronously online.

The Apprentice Programme mentioned earlier is a new teacher induction initiative by the Ministry of Education that started in 2019, where applicants go through numerous stringent selection procedures before enrolling in the MTeach programme. There were 44 MTeach apprentice student teachers in total—31 specialising in Secondary Education, 9 in Primary Education and 2 in Early Childhood Education and Care. Based on the press release by the Programme Leader, all MTeach apprentice student teachers were required to continue their school placements at their earlier assigned schools with the following provisions: firstly, the arrangement followed the BCP of the respective schools (e.g. flexi-hours, following shifts) as per instructed by the school leader and mentor, and, secondly, the expectations from schools would carry on following school arrangements with regard to supporting students' online learning and also assigned tasks from the mentor and school leader.

Fourteen MTeach students were asked to share about their school practicum experiences during the COVID-19 pandemic by reflecting on their teaching, students' learning and respective school situations. All respondents stated that the initial news about the changes they needed to make in their teaching came from their corresponding leaders through the mobile application WhatsApp. The given instructions on preparing teaching materials for their students were mainly similar across all schools. For example, Halim, an MTeach apprentice student teacher based in a government secondary school located more than 100 km from the country's capital city Bandar Seri Begawan, shared the following:

After receiving the news on COVID-19, the school leader at our school informed us through WhatsApp group to prepare a 1-month worth of home learning pack in 2 weeks. Teaching was to be done through an online platform, preferably Microsoft Teams. Students were given their respective email accounts to be used to login using Teams for their lessons. That said we were also given options to do the class through Zoom or through WhatsApp considering the availability of technologies that the students have.

Meanwhile, Maya, who is based in a government secondary school less than 20 km from the city centre, shared similar preparations in her school. She further stated:

Changes on tactics that the school decided to adopt were made and informed via WhatsApp with no heads up and required immediate action i.e. the time allowed to conduct our teaching lessons, the amount of (Home-Based Learning) HBL allowed as well as students' schedule to attend online lessons.

Maya persevered during the preparation and implemented several revisions to her teaching activities that included asynchronous teaching lessons in which she uploaded short video lessons on YouTube for her students to watch anytime. In ensuring that her students watched the videos, she assigned lesson quizzes through the *Kahoot!* online quiz platform. Maya also conducted live online discussions using Zoom during her students' scheduled timetable for Mathematics lessons in order to interact with them if they have any questions pertaining to the uploaded video lessons. Similar teaching activities were also observed for student teachers teaching at the primary school levels, with one of them emphasising that the duration of the video created lasted a maximum of six minutes only. Perhaps she may have duly researched about the six-minute online video rule, which has since been refuted as a myth (Geri et al., 2017; Lagerstrom et al., 2015).

The challenges presented to these student teachers during COVID-19 affected them intellectually, physically, spiritually and emotionally. Not only had the expectations been set high—especially since they were part of the graduate-level teacher training programme—they were also faced with the different levels of challenging demands from the schools, school leaders, mentors, students and parents. Noreen, who is an MTeach apprentice student teacher specialising in Early Childhood Education and Care, had her school placement in a government primary school. She shared that among the challenges she encountered were the difficulties in keeping track of her students' learning progress, as well as the dependence of some parents with no experience in teaching who relied heavily on her to teach their children. This made her anxious, particularly as there were also parents who did not give their full cooperation in their child's learning. Rahimah, who specialises in Early Childhood Education and Care, shared the same sentiments as Noreen:

[I was] worried about children's learning if they could comprehend the lesson and answer themselves on the worksheet given. Less stress as not to deal with students physically, but more to dealing with parents, videos, Google form link and worksheet, and going through them before giving them to the students. Some of the parents were not cooperating well to collect HBL and help with their children's learning.

In contrast to the MTeach apprentice student teachers, those who enrolled as full-time students were required to end their practicums earlier than anticipated following the press release by the Programme Leader. Nadia and Rizal were fortunate to resume the current semester practicum without facing the challenges as experienced by their peers in the previous semester. Nadia stated that she spent more time in front of her laptop exploring the numerous free online applications and resources. However, there was limited Internet access because everyone in her house was connected online using the same Wi-Fi server. There were mixed reactions from the respondents on the use of online learning at the school level. While some welcomed it as a new and worthy experience, others still preferred the face-to-face physical classes citing the ease of getting students to respond to questions, being able to reciprocate in terms of expressions and the need to rebuild essential teacher-student rapport in the classroom.

16.5 EDUCATOR RESPONSES TOWARDS CHANGES IN EDUCATIONAL PRACTICES

In the face of the COVID-19 pandemic, government-mandated measures included social distancing, restrictions on mass gatherings, the enforcement of mask-wearing and the use of digital contact tracing through *BruHealth*, a mobile phone app which was swiftly created and promoted to ensure that the Ministry of Health had better access to data to help combat any potential contagion. These measures had cascading effects across all areas of life in the country, and the educational sector was no exception. Remote meetings became a way of life almost overnight, resulting in an exponential upsurge in the usage of online tools, programmes and learning environments such as Zoom, Canvas and Microsoft Teams. Along with these changes came new challenges—students (and their parents) suddenly found themselves having to deal with studying and working from home, with each person vying for Internet bandwidth and relevant devices needed for their particular tasks. Younger students also needed extra parental attention and supervision, which for many people would often prove to be a scarce resource.

Between the school closures in March, the beginning of the de-escalation plans in mid-May and the eventual resuming of the normal academic term at the end of July, educators at multiple levels had to consider how to best do their jobs while navigating all the new rules. Those with

institutional support, who were already comfortable with technology or could afford to invest in it themselves, had a few less hurdles to clear. Even so, the new requirement for online teaching would be a test for everyone, given Brunei's nascent foray into digital education. cursory conversations with different educators revealed some interesting anecdotes with regard to new institutional policies, tools provided or used, and their overall experiences with teaching during the pandemic (Keasberry, 2020).

Many of the policies implemented placed immense pressure on teachers (Phan et al., 2020). One such example could be seen in a number of primary schools, where teachers were often expected to prepare Home-Based Learning (HBL) packs that would be collected by parents on designated days. Thus, much more preparation time was needed, which meant higher strains on teachers' time and effort. Moreover, teachers did not have full discretion over what material to include in the HBL packs; they needed to justify whatever topics they would put in the packs.

One common result of the new policies was that even with schools re-opening, many students would be spending part of their week studying from home. This meant that the HBL material had to be digitised and uploaded online, usually on a cloud service or the school website. Regardless, there were still students without proper Internet or access to a PC or laptop, and so physical HBL packs still had to be prepared and distributed every week. In some cases, teachers often had to contact parents personally to ascertain their circumstances with regard to Internet connectivity, device availability and even preference for hardcopy or softcopy assignments.

Teachers also found that continual adjustments had to be made to the curriculum and content as they navigated this new online asynchronous teaching. It was difficult to tell what young students were able to digest over the Internet and delivery methods had to adjust for differences in Internet connections and speeds. As a result, some teachers opted to skip the more difficult topics until such a time when students were allowed to return to proper face-to-face classes. This was compounded by Internet issues that teachers faced themselves, as there were times that the school Internet connection was unreliable.

While the new policies were designed in preparation for the re-opening of the new academic term, exactly how these policies were to be implemented on the ground level often seemed to be unclear. Teachers were frequently left to their own devices—both literally and figuratively—and had to cobble together their own pedagogies using tools that were either

foisted on them or already familiar to them before the pandemic. Suddenly, setting and marking assignments no longer took place in a physical classroom, but an online one. Face-to-face teaching gave way to screen recordings, uploaded class sessions or live video conferences. Existing content had to be reworked for online classes, which ended up being massively time-consuming. Ultimately, teachers had to decide for themselves what worked best and work accordingly, which itself frequently led to discrepancies between school levels, with primary sections tackling the challenge one way and secondary sections doing it another way.

With all these new digital tools, it seems almost inevitable that teachers would quickly encounter their next big hurdle: technical ability (or lack thereof). The rapid rise in online teaching caused some teething problems as many educators were not used to providing online education. However, beyond their own proficiency, they were also faced with the varying capacities of students and their parents. How would a teacher get their students into a Google Classroom if neither the students nor their parents knew how to navigate it? How would students access their online exercises and videos on Microsoft Teams if they did not know where to look?

All of these issues together often compounded teachers' already busy work life. Each new obstacle presented new challenges and necessitated a lot more communication between teachers and their heads of department, between teachers and their administrative staff, as well as between teachers and parents, all of which lead to even more pressure in terms of time and commitment. To say that teacher stress levels increased during the pandemic might be something of an understatement. While teachers' mental health and safety is something to be concerned about in and of itself, students' stress levels also need to be considered as there has been research to suggest that teachers' occupational stress is linked to students' physiological stress levels (Oberle & Schonert-Reichl, 2016). Teacher burnout means less effective teaching and classroom management, and students are consequently affected.

Similar issues also existed at the tertiary level. Based on early observation and responses from educators at UBD as reported by Noorashid (2020), the abrupt transitioning from classroom learning to online-distance learning had undoubtedly imposed various challenges to the educators.

Educators, particularly those who were more mature, yearned for more support in terms of the knowledge and skills to manoeuvre online-distance learning platforms and applications during the height of the pandemic.

The limitations of technical skills in using devices and platforms in e-learning have been consistently suggested to cause limitations to the teaching and learning process (Aljawarneh, 2020; Dunlap et al., 2016; Peachey, 2017), thus raising concerns over the post-COVID effects on students, as well as on the educators themselves. Along similar lines, the abrupt transition caused challenges in terms of preparing teaching materials, where in some cases, educators had to restructure and reorganise their courses to much simpler ones in order to accommodate the demand of effective online pedagogy and successful deliverance of knowledge to their students. The situation also affected assessment practices among these educators. Some had to adopt a more lenient approach in assessing their students' works and reconsider relevant tasks to support their students' final grades. A few educators also reported that they had to opt for 100% coursework as a way to find common ground with their students, as well as to adjust to the restriction of movement during the height of COVID-19 in the country. Nevertheless, a handful of teacher educators still divulged that the pandemic had severely impacted the way they work with students, the students' teaching practice opportunities and conducting school research.

A few studies in international contexts have described current pedagogical challenges in higher education and academic communities' efforts in coping with the effects of COVID-19 (Karalis, 2020; UNESCO, 2020; Ya, 2020). In Brunei, whilst considering pedagogical effectiveness using distance learning, some educators took the initiative to share knowledge with their peers in and outside of the country in an attempt to find the best approach and platforms for online learning that would be preferable by the university and academic communities. This included mulling over various aspects, such as cost effectiveness and convenience for both themselves and their students. While such approaches helped the educators to consider their pedagogical initiatives to ensure equal opportunities of learning for the students during those challenging times, some educators also reported taking into account their students' wellbeing at the same time. In these cases, it can be seen that the role of educator has also expanded, from being just a teacher to including research and counselling. Moreover, there have been less restrictions and involvement of other sectors and departments in managing BCPs for higher education, in comparison to their core-level education division. This has possibly given more opportunities for these educators to explore their potential and initiatives in dealing with pedagogical issues and challenges during COVID-19. For

instance, Suhaili (2020) reported that upon the announcement that higher education institutions were required to come up with their own BCP, UTB and its academics launched various initiatives to cater to the needs of their students, such as utilising online educational platforms and preferable non face-to-face teaching and learning methods.

Nevertheless, judging from distance interviews undertaken with educators in UBD, it became clear that amid their resilience in ensuring the efficacy of their pedagogy, almost all the educators hinted at their exhaustion and unstable emotions in dealing with various challenges faced while keeping up with the unprecedented phenomenon. For example, a number of them referred to the whole situation as ‘a lonely time’, ‘a stressful event’, an ‘exhausting period’ and feeling ‘frustrated’, stating that the abrupt changes as not being ‘conducive to [one’s] emotional and mental wellbeing’. Whilst more in-depth studies are needed to probe further into the educators’ discourse of wellbeing, it cannot be denied that the pandemic has also affected the psychological and sociological equilibrium of their lives both personally and professionally. Moreover, a few expatriate educators also reported their frustration at not being able to travel and meet their families abroad, the uncertainties about transnational benefits they normally receive and their general wellbeing. This is perhaps inevitable as claims of psychological and sociological effects from COVID-19 have also been reported in previous accounts in international contexts (Hughes, 2020; Karalis, 2020; Karalis & Raikou, 2020), where it is also consistently claimed that the psychological aspects can strongly impact the whole efficacy of pedagogy in higher education institutions. Furthermore, Moorhouse (2020) claims that the pandemic may have caused certain detrimental effects in our post-crisis society, including distancing effects between educators and their students. These effects have been raised and also reflected on by a number of the local and expatriate educators at the university.

A Global Survey Report was recently launched and conducted by the International Association of Universities (IAU) and was undertaken during the height of COVID-19. The report aimed to identify and to understand disruption caused to and responses made by HEIs all over the world (IAU, 2020). According to the report, there were three major pedagogical challenges found in the following areas: (1) technical infrastructure and accessibility; (2) distance learning competences and pedagogies; and (3) the field of study.

Based on Noorashid's (2020) and Shahrill et al.'s (2020, 2021) early observations on the impact of COVID-19 on the educators in the university, the factors of 'technical infrastructure and accessibility' and 'distance learning competences and pedagogies' are apparent in the educators' reports. Moreover, the aspect of 'the field of study' or subject is also observed, particularly from a few teacher educators' claims that the research students at the teacher education institution was strongly impacted by the restricted movement during the height of the pandemic. The closure of schools, as well as limitations of entry and time for these students, disrupted their academic endeavours. Whilst such claims demonstrate impacts on students, a larger assessment reported by Noorashid et al. (2020) has shown more comprehensive pedagogical and sociological experiences during COVID-19 based on the educators' responses involving four major public higher institutions in Brunei, including UBD, UTB, KUPU SB and Universiti Islam Sultan Sharif Ali (UNISSA). Whilst the article highlights several pedagogical issues experienced by the educators in these higher education institutions, it also entails the quick adjustments, approaches and initiatives that have been implemented by these educators through continuous support from their universities, the ministries and the government. These attempts are to support the 'Whole of Nation Approach' promoted by the government while continuing to play their roles to ensure higher education functionality.

Even when faced with challenges, educators at all levels of education took them in stride, doing their best to engage their students using the new tools and bridge any gaps so that no student is left behind. Many educators supported one another, shared stories and anecdotes about different policies, and aided others in the use of new technologies. Upon the announcement of Phase 4 of the de-escalation plan at the end of July, there seemed to be a collective sigh of relief from the majority of teachers. Things could now go back to normal or as normal as things could be while the outside world still roiled in the midst of a global pandemic.

16.6 CONCLUSION

Undoubtedly, the COVID-19 pandemic has affected educational affairs in various ways, particularly the academic communities, educators and students, both in Brunei and across the world. The pandemic has forced the academic community in the country to mull over various implementations

and come up with necessary measures to ensure the pandemic does not affect educational affairs in the country for too long. The roles and responsibilities of everyone in the academic community have also expanded as a result.

Nevertheless, amidst these challenges, educators at all levels in Brunei have been able to cope and strategise necessary pedagogical affairs in support of the government and show resilience in dealing with the inevitable limitations and restrictions of COVID-19. In line with this, the government through the Ministry of Education and other relevant agencies continues to find ways to support the academic communities across Brunei, including educators and their students. Although there are still concerns over the future state of education and its management, to date the approach of open communication and continuous support between agencies for the education sector in the country was triumphant in dealing with the challenges during the pandemic.

Within the completion of this chapter, Brunei successfully flattened the curve and managed to curb the impacts of COVID-19 on the nation. Simultaneously, the multi-sectoral initiatives implemented by various ministries under the 'Whole of Nation Approach' promoted by the government of Brunei have received adulation from the public in Brunei and from international agencies and organisations. This has also provided opportunities to gain a deeper look into how Brunei has managed its educational affairs and pedagogical approaches involving important stakeholders at all levels of education. Whilst this chapter only focuses on reviewing changes of policy and practices and analysing responses from educators amid COVID-19, further research will need to be undertaken to fully understand and resolve other related issues, by considering the perspectives of students and the managerial stakeholders in Brunei education.

As the pandemic is an ongoing phenomenon experienced by various communities globally, more investigations should be carried out on educational affairs in Brunei, which will contribute to new knowledge and further benefit the international academic communities in many ways. Furthermore, as few studies have looked into such issues, particularly in contextualising Brunei as a case study, additional insight and research would produce more comprehensive perspectives on the current situation of education in Brunei amid COVID-19.

REFERENCES

- Abdullah, N. A., Shahrill, M., Yusof, J., & Prahmana, R. C. I. (2018). Identifying the factors affecting students' performances in primary school mathematics. *Journal of Physics: Conference Series*, 1097(1), 012137.
- Aljawarneh, S. A. (2020). Reviewing and exploring innovative ubiquitous learning tools in higher education. *Journal of Computing in Higher Education*, 32(1), 57–73. <https://doi.org/10.1007/s12528-019-09207-0>
- Boitshwarelo, B., Reedy, A. K., & Billany, T. (2017). Envisioning the use of online tests in assessing twenty-first century learning: A literature review. *Research and Practice in Technology Enhanced Learning*, 12(1), 1–16.
- Day, T., Chang, I. C. C., Chung, C. K. L., Doolittle, W. E., Housel, J., & McDaniel, P. N. (2020). The immediate impact of COVID-19 on postsecondary teaching and learning. *The Professional Geographer*, 1–13. <https://doi.org/10.1080/00330124.2020.1823864>
- Dunlap, J., Verma, G., & Johnson, H. (2016). Presence + Experience: A framework for the purposeful design of presence in online courses. *TechTrends*, 60(2), 145–151. <https://doi.org/10.1007/s11528-016-0029-4>
- Geri, N., Winer, A., & Zaks, B. (2017). Challenging the six-minute myth of online video lectures: Can interactivity expand the attention span of learners? *Online Journal of Applied Knowledge Management*, 5(1), 101–111.
- Government Education Institutions. (n.d.). <http://www.moe.gov.bn/SitePages/Government%20Education%20Institutions.aspx>
- Government of Brunei. (2020, May 8). Measures Undertaken by the Government in Addressing the Impact of COVID-19 in Brunei Darussalam. <http://www.moe.gov.bn/Articles/Measures%20Undertaken%20by%20the%20Government%20in%20Handling%20the%20Impact%20of%20COVID-19%20%20issued%2027.04.2020%20v7.pdf>
- Haji Yahya, S. (2020, April 20). *Jabatan mufti terbitkan buku mengenai COVID-19*. *Media Permata*. <https://mediapermata.com.bn/jabatan-mufti-terbitkan-buku-mengenai-covid-19/>
- Hiebert, J., Gallimore, R., Garnier, H., Givvin, K. B., Hollingsworth, H., Jacobs, J., Chui, A., Wearne, D., Smith, M., Kersting, N., Manaster, A., Tseng, E., Etterbeek, W., Manaster, C., Gonzales, P., & Stigler, J. (2003). *Teaching mathematics in seven countries: Results from the TIMSS 1999 Video Study*. U.S. Department of Education, National Center for Education Statistics.
- Higher Education Division. (n.d.). <http://www.moe.gov.bn/SitePages/Higher%20Education%20Division.aspx>.
- Hughes, C. (2020). Some implications of COVID-19 for remote learning and the future of schooling. <https://unesdoc.unesco.org/ark:/48223/pf0000373229>
- IAU. (2020). Covid-19: Higher Education challenges and responses. <https://www.iau-aiu.net/Covid-19-Higher-Education-challenges-and-responses>

- Karalis, T. (2020). Planning and evaluation during educational disruption: Lessons learned from COVID-19 pandemic for treatment of emergencies in education. *European Journal of Education Studies*, 7(4), 125–142. <https://doi.org/10.5281/zenodo.3789022>
- Karalis, T., & Raikou, N. (2020). Teaching at the times of COVID-19: Inferences and implications for higher education pedagogy. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 479–493. <https://doi.org/10.6007/IJARBS/v10-i5/7219>
- Keasberry, C. (2020). *Zoom in: Perceptions and perspectives of pandemic pedagogy*. Seminar presented at International and Comparative Education (ICE) Seminar Series, Universiti Brunei Darussalam, Tungku Link, September 1.
- Khan, S., & Khan, R. A. (2019). Online assessments: Exploring perspectives of university students. *Education and Information Technologies*, 24(1), 661–677.
- Kon, J., & Roslan, W. (2020, September 23). Rising to the COVID-19 challenge. *Borneo Bulletin*. <https://borneobulletin.com.bn/2020/09/rising-to-the-covid-19-challenge/>
- Lagerstrom, L., Johanes, P., & Ponsukcharoen, M. U. (2015). The myth of the six-minute rule: Student engagement with online videos. Proceedings of the American Society for Engineering Education, June 14–17, 2015, Seattle, WA. <https://www.asee.org/public/conferences/56/papers/13527/download>
- Lampert, M. (2001). *Teaching problems and the problems of teaching*. Yale University Press.
- Ministry of Education. (2013). *The national education system for the 21st century: SPN21* (2nd ed.). Ministry of Education.
- Ministry of Education. (2014). *Brunei Darussalam qualification framework*. Ministry of Education.
- Ministry of Education. (2019a). *Brunei Darussalam Education Statistics 2018*. Educational Data Management Section, Department of Planning, Development and Research, Ministry of Education. <http://www.moe.gov.bn/DocumentDownloads/Education%20Statistics%20and%20Indicators%20Handbook/Brunei%20Darussalam%20Education%20Statistics%202018.pdf>
- Ministry of Education. (2019b). *Brunei Darussalam Education Statistics and Indicators Handbook 2014–2018*. Educational Data Management Section, Department of Planning, Development and Research, Ministry of Education. <http://www.moe.gov.bn/DocumentDownloads/Education%20Statistics%20and%20Indicators%20Handbook/Brunei%20Darussalam%20Education%20Statistics%20and%20Indicators%20Handbook%202018.pdf>
- Ministry of Education. (2020). *Schools Operation Protocol Matrix during COVID-19*. Ministry of Education. <http://www.moe.gov.bn/Articles/School%20Reopening%20Plan%20Protocol.pdf>
- Ministry of Education, Brunei Darussalam. (2020a, March 10). *Surat Pemberitahuan Kementerian Pendidikan Bilangan: 2/2020* – Ministry of

- Education Notice No. 2/2020 (*Perubahan Tarikh Cuti Penggal Pertama Persekolahan – Changes to the First Term School Holidays*). <http://www.moe.gov.bn/SitePages/NewsArticle.aspx?AID=637>
- Ministry of Education, Brunei Darussalam. (2020b, March 25). *Pembelajaran Dan Pengajaran Secara Dalam Talian (Online) Penggal Persekolahan Ke-Dua – Second School Term Online Teaching and Learning*. <http://www.moe.gov.bn/SitePages/NewsArticle.aspx?AID=645>
- Ministry of Health, Brunei Darussalam. (2020a, March 9). Detection of the First Case of COVID-19 Infection in Brunei Darussalam. [http://www.moh.gov.bn/Shared%20Documents/2019%20ncov/press%20releases/FINAL%20Press%20Release%20\(eng\)%20-%20First%20Case%20COVID-19%20in%20Brunei%20Darussalam%20\(2\).pdf](http://www.moh.gov.bn/Shared%20Documents/2019%20ncov/press%20releases/FINAL%20Press%20Release%20(eng)%20-%20First%20Case%20COVID-19%20in%20Brunei%20Darussalam%20(2).pdf)
- Ministry of Health, Brunei Darussalam. (2020b, March 10). Media Statement on the Current COVID-19 Infection in Brunei Darussalam. [http://www.moh.gov.bn/Shared%20Documents/2019%20ncov/press%20releases/FINAL%20PRESS%20STATEMENT%20COVID-19%20INFECTION%2010%20MARCH%202020%20\(ENG\).pdf](http://www.moh.gov.bn/Shared%20Documents/2019%20ncov/press%20releases/FINAL%20PRESS%20STATEMENT%20COVID-19%20INFECTION%2010%20MARCH%202020%20(ENG).pdf)
- Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course ‘forced’ online due to the COVID-19 pandemic. *Journal of Education for Teaching*, 1–3. <https://doi.org/10.1080/02607476.2020.1755205>
- Noorashid, N. (2020). *COVID-19 and responses from university teachers and students in Brunei: An initial overview and implications for research and pedagogy*. Seminar presented at International and Comparative Education (ICE) Seminar Series, Universiti Brunei Darussalam, Tungku Link, August 11.
- Noorashid, N., Phan, L. H., Alas, Y., & Yabit, V. M. (2020, October 10). Beyond the pandemic, integrating online learning. *University World News*. <https://www.universityworldnews.com/post.php?story=20201009150047136>
- Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science*, 159, 30–37. <https://doi.org/10.1016/j.socscimed.2016.04.031>
- Peachey, N. (2017). Synchronous online teaching. In M. Carrier, R. M. Damerow, & K. M. Bailey (Eds.), *Digital language learning and teaching* (pp. 143–155). Routledge.
- Phan, L. H., Yabit, V. M., & Alas, Y. (2020). *Effects of COVID-19 on educational policy and stakeholders in Brunei, Malaysia and Indonesia*. Seminar presented at International and Comparative Education (ICE) Seminar Series, Universiti Brunei Darussalam, Tungku Link, August 25.
- Prime Minister’s Office. (2020). *Guideline for Business Continuity Plan on COVID-19 for Civil Service*. Prime Minister’s Office. <http://www.pmo.gov.bn/SiteCollectionDocuments/covid19/bcp-eng.pdf>

- Shahrill, M. (2009). *From the general to the particular: Connecting international classroom research to four classrooms in Brunei Darussalam* (Unpublished doctoral dissertation), University of Melbourne, Melbourne.
- Shahrill, M., Abdul Aziz, A. B. Z., Naing, L., Petra, M. I., Yacob, J., & Santos, J. H. (2020). *The developments and findings of online learning in UBD during the COVID-19 pandemic*. Seminar presented at International and Comparative Education (ICE) Seminar Series, Universiti Brunei Darussalam, Tungku Link, September 15.
- Shahrill, M., Abdullah, N. A., & Yusof, J. (2014). Research Report: Teachers and Teaching of Mathematics in Primary Schools in Brunei Darussalam. Department of Planning, Development and Research, Ministry of Education, Brunei Darussalam.
- Shahrill, M., & Hardaker, G. (in press). Country case study for Brunei Darussalam. In M. R. Panigrahi & B. Phalachadra (Eds.), *Handbook on online education in commonwealth Asia: Case studies*. Commonwealth Educational Media Centre for Asia (CEMCA).
- Shahrill, M., Hardaker, G., Yacob, J., & Petra, M. I. (in press). Institutional case study for Universiti Brunei Darussalam. In M. R. Panigrahi & B. Phalachadra (Eds.), *Handbook on online education in commonwealth Asia: Case studies*. Commonwealth Educational Media Centre for Asia (CEMCA).
- Shahrill, M., Petra, M. I., Naing, L., Yacob, J., Santos, J. H., & Abdul Aziz, A. B. Z. (2021). New norms and opportunities from the COVID-19 pandemic crisis in a higher education setting: Perspectives from Universiti Brunei Darussalam. *International Journal of Educational Management*, 35(3), 700–712. <https://doi.org/10.1108/IJEM-07-2020-0347>.
- Sithamparam, S., Tan, J. P. S., & Raju, C. J. (2014). *Research Report: Teachers and Teaching of English Language in Primary Schools in Brunei Darussalam*. Department of Planning, Development and Research, Ministry of Education, Brunei Darussalam.
- Suhaili, W. S. H. (2020). Brunei Darussalam – Impact of COVID-19 on Brunei’s higher education teaching. In P. G. Altbach, S. Gopinathan, L. H. Yeong, & T. Balakrishnan (Eds.), *Special issue 8 higher education in Southeast Asia and beyond: How is COVID-19 impacting higher education?* (pp. 25–27). The HEAD Foundation.
- Tarasat, S., Jaidi, N., & Rahman, S. K. A. (2014). *Research Report: Teachers and Teaching of Bahasa Melayu (Malay Language) in Primary Schools in Brunei Darussalam*. Department of Planning, Development and Research, Ministry of Education, Brunei Darussalam.
- Tong, C. K., & Daud, K. H. M. (Eds.). (2020, October). COVID-19: Adapting to new norms. *Discover UBD*, 3, 3–16. <https://ubd.edu.bn/DiscoverUBD/issue38/>

- Tuah, N. A. A., & Naing, L. (2020). Is online assessment in higher education institutions during COVID-19 pandemic reliable? *Siriraj Medical Journal*, 73(5) <https://he02.tci-thaijo.org/index.php/sirirajmedj/article/view/246342>
- UBD in the COVID-19 Pandemic. (2020, July 27). Latest News: Universiti Brunei Darussalam. <https://ubd.edu.bn/news-and-events/covid19.html>
- UNESCO. (2020). COVID-19 Educational Disruption and Response. <https://en.unesco.org/covid19/educationresponse>
- Wong, J., Chaw, L., Koh, W. C., Alikhan, M. F., Jamaludin, S. A., Poh, W. W. P., & Naing, L. (2020a). Epidemiological investigation of the first 135 COVID-19 cases in Brunei: Implications for surveillance, control, and travel restrictions. *The American Journal of Tropical Medicine and Hygiene*, 103(4), 1608–1613.
- Wong, J., Koh, W. C., Alikhan, M. F., Abdul Aziz, A. B. Z., & Naing, L. (2020b). Responding to COVID-19 in Brunei Darussalam: Lessons for small countries. *Journal of Global Health*, 10(1), 1–4. <https://doi.org/10.7189/JOGH.10.010363>
- Ya, S. W. (2020, April 8). *Education during COVID-19*. Institute of Democracy and Economic Affairs.