# The Opportunities and Challenges of Learning Online During the Pandemic: Thai High School Students' Perspective

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## Abstract

*This paper investigates students' online learning experience during COVID-19, specifically aiming to identify points of improvement within the current distance-learning infrastructure in Thailand. The research consolidates students 'opinions toward online learning, their ease in adapting to the new learning environment, which depends not only on each student's learning style but also on their teachers as well as social and economic factors. Identifying the advantages and disadvantages of learning from home, the research presents students' needs and suggestions for improvement. As such, this work may guide future adjustments to online learning.*

## Keywords

## 1. Introduction

Education is one of the most essential institutions throughout many countries so that people show their priority of learning. It does not only provide knowledge for children, but it also instills good morals and shapes them into becoming good citizens. Therefore, children receive education as a fundamental need. Furthermore, there are many teaching methods at this time, namely, in-person learning, virtual learning, hybrid learning, and so forth. However, many countries, in this globalized era, have contemplated using innovative technology as part of an effective educational system. It is at this perfect moment that we see the greatest purpose and function of the internet and various learning communications.

Learning at school also finds the use of many electronic devices such as teaching materials, including televisions, videos, slide presentations, and computers which makes us realize the important role of technology in education. In the event that a student goes to school and is infected with Covid-19, they still have to learn at home using online platforms. In some educational institutions with a low risk of infection, hybrid classes with the component of both online and onsite learning are imposed. Therefore, online teaching is necessary for students to be both a medium and a facilitator during the epidemic.

As a student myself, I can see the sudden shift from a conventional classroom to an online classroom during the spread of pandemics At that initial situation, nobody anticipated that the beginning of a new decade would put humanity and the world through one of the most significant tests in recent decades. To illustrate more, this pandemic called the Coronavirus (COVID-19) which was originally taken place in 2019 in Wuhan, China. But in Thailand, reporting the first infected patient in 2020, the Ministry of Public Health (MoPH) announced the multiple

lockdowns as the number of patients increasingly surged, according to the widely spread of disease from the patient's respiratory tract.

As a consequence, many schools change the way of face-to-face communication between teachers and students to online learning to prevent the infection of Covid-19. It is one of the alternative teaching methods which is common in a considerable number of areas, especially remote areas. However, teaching on online platforms is not new in Thailand because King Bhumibol Adulyadej started the Distance Learning Television program to provide fundamental education specifically for students living in distant areas in 1995. When students face this new learning style, some are adaptable and some are not to this huge adjustment, particularly students who have never learned online classes before.

Learning online has both advantages and disadvantages from students' perspectives. Looking at the positive consequences, children may have more time to do activities they enjoy. In other words, more time is spent each day on other activities aside from learning. On the other hand, most of them face many problems such as changing social conditions, economy, especially health issues after having to study online all day which may have long-term effects in the future. The contributing factors to these problems were either the environment or simply online learning alone.

This research investigates the behavior of students who have to adjust their learning method, to identify the benefits and drawbacks of online learning as a result of various factors, and to find a way to develop an online learning system to meet the needs of students and be effective and sustainable in the future. It is also most beneficial to the education system in terms of the convenience of students, staff, teachers, and schools.

The advantages should be maintained and used as a role model for the next generations. In the case of disadvantages, it will be improved and developed to create a better system of learning. If the same occurrence happens in the future, it will be able to cope efficiently. Finally, online education is very important to children as a substitute for classroom learning and the adaptation to learning online should be practiced for them. The ultimate goal of this research would make the most benefits for Thai Education in the future. If the situation has not become better, the school semester might be postponed. Therefore, this will be useful for both teachers and students to improve and develop a better online system during Covid-19.

## 2. REVIEW OF RELATED LITERATURE

"Following the pandemic-induced, sudden shift to online learning in Thailand, Hiranrinthikorn [1] cautioned that online learning, while beneficial in reducing health risks during the pandemic, may be inaccessible to many students." Furthermore, interviewing managers of small businesses, academics and policymakers, the study concluded the major advantage of online learning to be the additional amount of time students have as commuting and various in-school activities have been eliminated. To be more specific, these sample groups were interviewed for their detailed opinions on the advantages and disadvantages of online learning. They were also asked to provide their thoughts on how to cope with this new way of studying. "On the other hand, drawbacks included a lack of social connection between students and teachers and insufficient learning time [1]." However, there is a disruptive device such as technologies. The researcher not only does illustrate but also emphasizes the quantitative results of learning online. Although both internal and external factors influence the effectiveness of online learning, the researcher gives many points of view to focus on the essential component that leads to success based on student satisfaction. "To reach the aim of the research, Hiranrinthikorn [1] demonstrated the five essential methods to study that are defining the research questions, setting up the goal of this

research, concentrating on the qualitative data, concluding all the results, proving it all, and receiving suggestions for further the research improvement."

The primary advantage of online learning over the traditional method lies in the use of technology to aid learning. "The integration of e-learning technology into university education has been shown to provide a number of benefits in previous research Raspopovic et al. [2]." "Rashid et al. [3] have also highlighted the elements of the online courses that prospective students should consider while determining their personal preferences." When opposed to traditional classrooms, e-learning can be a platform for offering a variety of delivery techniques for various types of learners." Additionally, elearning is a powerful tool since it can offer distinctive learning methods and enhance students' academic results. "Students can actively engage in an electronic learning environment where they can develop their critical thinking skills and study on their own Dumford and Miller [4]." "While Yilmaz [5] listed a few of the methods that are frequently employed to evaluate students who are participating in virtual learning". According to these findings, it is crucial for prospective e-learners to comprehend the differences between an e-learning classroom setting and a traditional classroom setting because there are benefits and drawbacks to both settings that may affect a student's overall performance.

"Moreover, Alghizzawi et al. [6] outlined some of the key benefits of e-learning, which uses a variety of devices, such as tablets, smartphones, and personal computers, to deliver education in a virtual environment." It means that online function passed through electronic devices provide several platforms for learners."These platforms encourage learning through a variety of features, such as the creation of online courses and the evaluation and supervision of student and teacher activity Alghizzawi et al. [6]." E-learning has been described as having the capacity to concentrate on the needs of specific learners. "For instance, concentrating on the requirements of individual students rather than the needs of educational institutions or teachers can efficiently transmit knowledge in the digital age Huang and Chiu [7]." "Joshua et al. [8] added that e-learning enables students or learners to rely on themselves so that teachers no longer act as the only source of information but rather as mentors and advisers." "In other words, people who are traveling or moving have a readily available resource for experience and learning because part-time and full-time students can take the chosen online degree courses from any location Radu, Radu, and Croitoru [9]."

While many disadvantages to online learning such as reduced in-person interaction and increased reliance on students' self-motivation are inevitable, its advantages are more open to possibilities depending on the design of the online program. "By giving pupils more computers and other electronic devices, more of the world's knowledge is made available online Talebian, Mohammadi, and Rezvanfar [10]." Maintaining motivation in an online course is another drawback for online learners. "When compared to their peers, students who lack independence and motivation had lower success rates Sarkar [11]." "Children learn best in a social setting, according to Lev Vygotsky [12], and they construct meaning through interacting with others." With guidance, assistance, and teamwork, a youngster can accomplish and resolve more challenging tasks than they can on their own. If courses are designed to facilitate learning via exploration, students can actively engage in the learning process. This method of instruction enables pupils to draw conclusions deductively and on their own. It also fosters intellectual growth and improves knowledge and durability.

Lack of self-regulation among students sometimes results in late or subparly completed assignments since they don't give themselves enough time to complete them. "Arkorful and Abaidoo [13] gave the reason that exams are typically given via the e-learning approach, there is less chance of preventing illegal actions like plagiarism and cheating." "Islam, Beer and Slack [14] showed the most obvious disadvantage of e-learning is the lack of crucial personal

interactions, both between instructors and students as well as between peers." "Gautam and Tiwari [15] named five areas of consideration in designing an effective online program: audience, course structure, page design, content engagement, and usability." When done correctly, the authors argued that online learning could allow students to study interactively, according to their individual needs and pacing, as well as give them the confidence to self-regulate and organize their learning. As the pandemic necessitates online education, and evaluation of current online curriculums must be done to ensure that arising problems are being addressed and potential advantages are being pursued.

## 3. METHODOLOGY

To gain insight into the perspectives of Thai high-school students on the advantages and disadvantages of online education during the pandemic, an online survey followed by one-on-one interviews was conducted from May to June of 2021. Participants consist of 100 Thai high-school students from Bangkok and nearby provinces. In Thailand, the high school covers grades 7 to 12 and is divided into two levels: lower high school (grade 7-9) and upper high school (grade 10-12). Figure 1 shows the percentage of participants by grade. At 43%, the majority of the participants were in grade 9, followed by grade 10 (28%), 11 (10%), and 7 (9%). The remaining 10% was from grades 8 and 12.
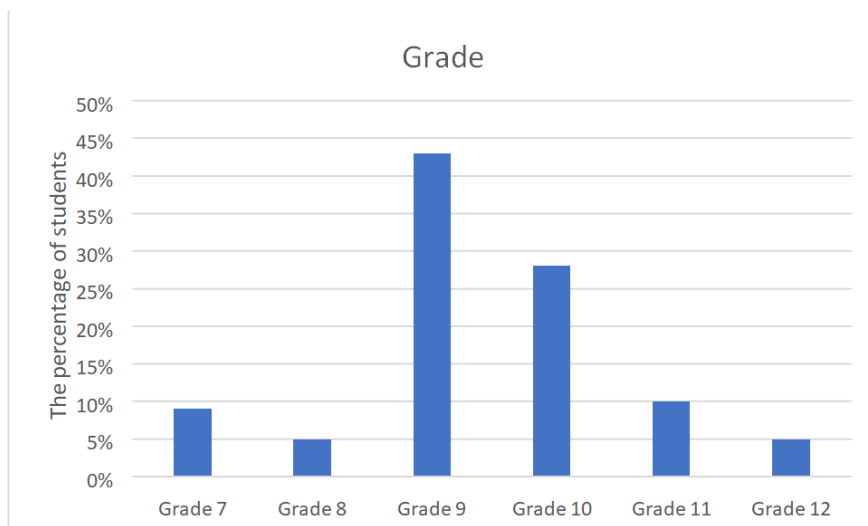


Figure 1. Percentage of participants by grade level

To investigate the impact of online learning on students from different academic concentrations, also known as "curriculums" in Thai high schools, participants were also asked to specify their curriculums. As shown in Figure 2, students in the Science-Mathematics curriculum (Sci-Math) make up 76.4% of the participants, followed by those in the Art-Language curriculum (Art-Lang) at 15.3%. The remaining 8.3% comprised those enrolled in the Art-Mathematics, Art-Science, and Art-Computer curriculums, which are similar in course structure and will be collectively referred to as the Art-STEM curriculum in this study.
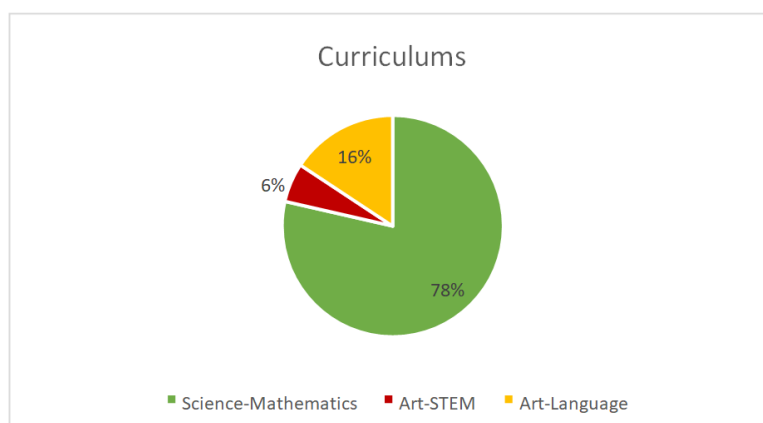
Figure 2. Percentage of participants by curriculum

The researcher used two research instruments: (1) an online survey platform and (2) interview. Google Form is the platform that I used for my data gathering. The online survey consisted of 23 multiplechoice and seven short-answer questions. Multiple-choice questions were used to collect the following data; participants' grade level and curriculum, feelings towards various aspects of the online classroom, and after-class activities. Participants answered closed questions on whether or not they experienced the following five common problems in their online curriculums; assignment overload, schedule overload, attention, comprehension, and health problems, which they then elaborated on in the short-answer questions. Assignment and schedule overload refers to the excessive number of assignments given and the overly packed online class schedule respectively. Attention and comprehension problems refer respectively to the difficulty in focusing during class and in understanding the subject matter. Health problem encompasses the decline in mental and/or physical health as a result of online learning. Upon submission of online survey responses, one-on-one interviews were conducted to allow participants to discuss in greater depth the benefits and drawbacks they had experienced so far in online learning. Lastly, their recommendations on how to improve online education were noted.

The reasons why the researcher used this platform are:

1. Receiving information conveniently and quickly.

The researchers do not have to go out to different places and prevent physical contact due to the COVID-19 situation.

2. When the data is input, Google Form, itself, can organize it, and depict graphs, pie charts, and statistics.

By conducting an Online Survey, we can analyze the information of the respondents immediately. It will be processed from the questionnaire which can be browsed in many formats, including graphs and summarizing information immediately.

3. As a result, the costs or expenses will be reduced than with traditional surveys, so It is a cost-effective research method.

4. Some data analysts found that the information obtained by filling out online questionnaires was more accurate.

Interview notes were compiled and analyzed for common themes among the reported problems and improvement recommendations. This is because the survey respondents can express their opinions without showing their identity. There are three open questions to ask the opinion of participants which they can type in the google form.

1. Obtaining information that goes beyond the researcher's speculative/determination issues based on knowledge and experience of informants is useful for analysis to draw conclusions and present information.

2. Obtaining clear, detailed information that is truly relevant to the researcher's needs.

3. Obtaining factual information that may not be sufficient when using choices of an answer.

4. Obtaining profound and complex information.

5. Presenting a range of viewpoints based on participants' genuine expressions.

Statistical analysis was performed using pie charts. Using pie charts presents a statistical analysis. This type of statistics is used to understand the study's distribution and participation called " Descriptive statistics." It employs frequency distribution to describe and summarize the features of numeric data groupings.

The case study of participants was evaluated about education to access the right model of online learning during COVID-19 whether it is the platform, the satisfaction, the teaching style of the teachers, or the interaction between teachers and students. Furthermore, the main statistics of this study show the benefits and harms of online learning and different aspects from participants that online learning is appropriate or not and shows how to tackle the problems.

## 4. RESULTS AND FINDINGS

### 4.1. Students' Perspective on the Advantages of Online Learning

During their interviews, most students named the convenience of studying from home without having to commute as one of the first advantages of online learning. Some students invested the time gained in hobbies that helped them destress from the packed schedule. A few students even reported turning their hobbies into small enterprises, some selling baked goods online while others picked up online work from home to help earn some income for their household during COVID-19 which has been financially difficult for many families.

In terms of academics, more time at home allowed some students to review and better prepare for each class. Certain time-consuming daily rituals such as morning assemblies had been replaced by each student prepping individually in front of their devices for their day of learning ahead. Some also benefited from the freedom of choosing their own time and place of study, if such options were available for their school's online learning program. Even though flexible class schedules are rare, many students still highly appreciate being able to learn in a more flexible manner, being free to move about, wearing their clothes of choice, or even doing something as inconsequential as snacking during class.

Some students proposed that online learning had resulted in improved student-teacher interactions. Prerecorded lessons offered by some teachers allowed students the added flexibility of learning at their own pace. Students also preferred digital assignment submission to the less eco-friendly and inconvenient use of physical copies. Moreover, student-teacher communications became much more direct and efficient than pre-COVID where emailing teachers was uncommon in Thailand. In class, students were now encouraged to communicate with their teachers much more than before, making use of features like emoji buttons or virtual hand-raising to participate actively.

## 4.2. Common Challenges Faced by Students Learning Online

The online survey revealed five main challenges students faced in their online learning, namely assignment overload, schedule overload, attention, comprehension, and health problems. Moreover, the prevalence of these problems varied across the three academic curriculums students is divided into starting in grade 10, namely Science-Mathematics (Sci-Math), Art-STEM, and Art-Language (ArtLang). Figure 3 shows the percentage of grade 10-12 students in each curriculum who experienced the five common problems aforementioned. The blue bar represents all students while the green, red and yellow bars represent those enrolled in the Sci-Math, Art-STEM, and Art-Lang curricula respectively.
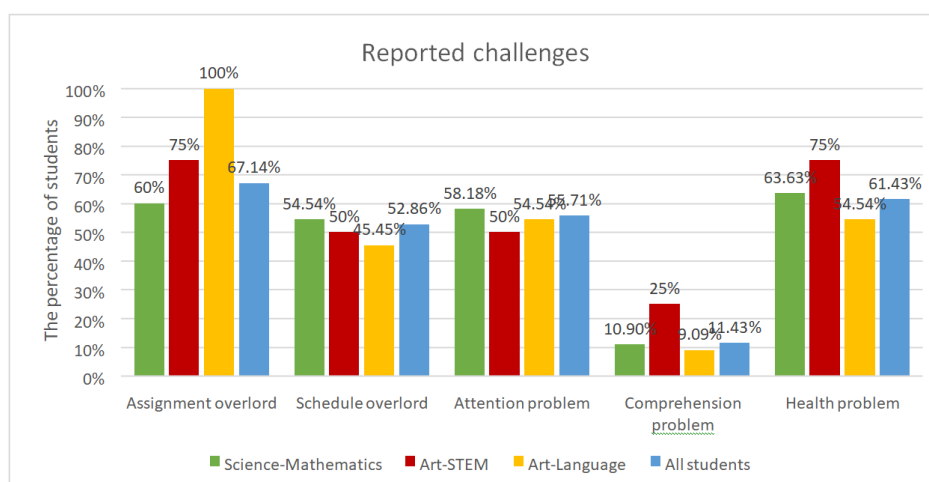


Figure 3. The percentage of grade 10-12 students experiencing five common online-learning problems

As shown by the blue bars in Figure 3, the most prevalent online-learning problem was assignment overload, experienced by 67.14% of students across all curriculums. As schools and each individual teacher were forced to quickly create online curriculums, there appears to be a lack of consolidated effort to decide on the total number of hours students are expected to spend in class and on assignments. This result was consistent with interview findings in which the majority of students complained of increased assignment load compared to learning in school. As the elimination of in-school activities and daily commute led to more free time, individual teachers were eager to fill it with assignments. However, the student argued that the lack of communication between teachers led to an uncoordinated increase in assignment load from all subjects, leaving students feeling overwhelmed without adequate daily rest. While this approach may successfully prevent students from disregarding what they have to learn in the syllabus, it takes away the joy of learning and leading students to online learning burnouts. Combined with staying constantly in their rooms, without going outside at all, students report feeling overwhelmed, stressed, anxious and depressed. Signs of stress on the body also arise following

long periods of being immobile and glued to their devices. As a result, issues like backaches, eye problems, and stress began to deter students from their usual study habits. Seemingly simple tasks such as staring at their computer screens for eight hours daily had proven to be challenging for many. As such, it is unsurprising that mental and physical health issues would follow as the second most prevalent problem affecting 61.43% of the students studying online.

While some students shared that they were able to concentrate on their online lessons due to their passion for learning and high level of self-regulation, these were the minority. With online learning, students are also much more easily distracted, especially by social media or other channels available on their devices, rendering classes that are already difficult to comprehend entirely ineffective. Figure 3 shows attention problems to affect more than half of the students at 55.71%. Many reported difficulties focusing while learning online since they were forced to do so from their homes. According to the online survey conducted, 51.5% of students deemed their home environments unsuitable for learning.

As seen in Figure 3, schedule overload was reported to be a problem for 52.86% of the students. During their interviews, students were asked to consider which subjects should be added or removed for online learning. First and foremost, students agreed that no subject must be added to the schedule because the existing curriculum was already too time and energy-intensive. Most agreed that subjects like physical education must be removed for the time being, as students cannot reap full benefits from PE lessons through learning theories online as opposed to actually exercising and practicing skill sets in different sports in traditional PE classes. This same argument was extended to other subjects requiring hands-on learning such as health education and music.

Another major disadvantage of online learning is that it is difficult for the students to truly comprehend the material being taught, usually, lecture-style in which the teachers can not easily gather real-time feedback or even see their students in some cases. Unless the teacher has planned for an interactive portion of the lessons, most students will not feel comfortable interrupting the flow of the lectures to let the teacher know that they are not comprehending. Figure 3 shows that comprehension problem was the least prevalent, affecting only 11.43% of students in grades 10-12. This surprisingly low percentage may reflect the fact that grade 10-12 students had gone through a selection process, evaluating their aptitude for their chosen curriculum. This selection process is particularly intensive for the most wellestablished and popular curriculums for Thai students, Science-Mathematics and Art-Language, both having fewer students with comprehension problems at 10.90% and 9.09% respectively.

In contrast, 53.3% of unspecialized students in grades 7-9 reported difficulties grasping the material being taught online, naming teachers' style of instruction as the main culprit. Students stated that some teachers went through material too quickly, perhaps as a result of not being able to gauge comprehension due to the lack of feedback in real-time from students. Unless the teacher has planned for an interactive portion of the lessons, most students will not feel comfortable interrupting the flow of the lectures to let the teacher know that they are not comprehending. Additionally, at the age where friendship is incredibly vital, most students lament the lost opportunity of learning alongside their peers. While a well-prepared presentation on the screen, when it comes by, is appreciated, one student echoes the sentiment of many in saying that "it is not enough." Students are now acutely aware of how much learning occurs in group settings, with real people and real discussions. Online learning that does not incorporate these in-person elements makes for lackluster learning. Some complained that their teachers did not prepare sufficiently for class, resulting in disorganized lessons that were difficult to follow. To make matters worse, demanding attention and interest, teachers have resorted to disciplining the students through point-system or forcing them to keep their cameras on at all times or giving

difficult assignments that are doable only when the students have mastered all the material covered in the lesson.

## 4.3. Challenges Faced by Students from Different Academic Curriculums

Exploring the problems by the curriculum, Figure 3 revealed that more Art-STEM students suffered from comprehension problems compared to their peers. 25% of Art-STEM students reported having difficulties understanding the subject matter, a percentage twice as high as other groups. As mentioned previously, the high level of selectivity for popular curriculums like Sci-Math and Art-Lang may contribute to their reported lower comprehension problems.

As for Art-Lang students, a striking 100% reported experiencing assignment overload. Art-Lang students reported spending a lot of time on project-based assignments, from extensive independent research and review of the literature to group playwriting. However, this group struggled the least in schedule overload, suggesting that online studies in arts and languages relied on more independent learning. Therefore, teachers must be more cautious of the learning burden placed on students when choosing this method of teaching. Sci-Math students reported a moderately high prevalence (54.5463.63%) for all problems except comprehension, where only 10.9% of the group had trouble as previously explained. Particularly of interest, Sci-Math students reported the highest level of schedule overload and attention problems. The former is unsurprising as this curriculum is made up of more subjects than others, as science is broken down into biology, chemistry, and physics. As for their shifting attention, Sci-Math students reported having difficulties staying engaged during online lessons especially when science was taught in lecture style without experiments or demonstrations. Passively learning about abstract concepts and going through numerous problem sets resulted in monotonous science lessons that failed to capture the attention of the 58.2% of Sci-Math students.

## 4.4. Students' Behaviors and Attitudes Towards Various Aspects of Online Learning

Figure 4.1-4.3 shows students' perceptions towards compulsory use of camera, lesson content, and teachers' IT skills respectively, while Figure 4.4 shows activities carried out by students following online classes.
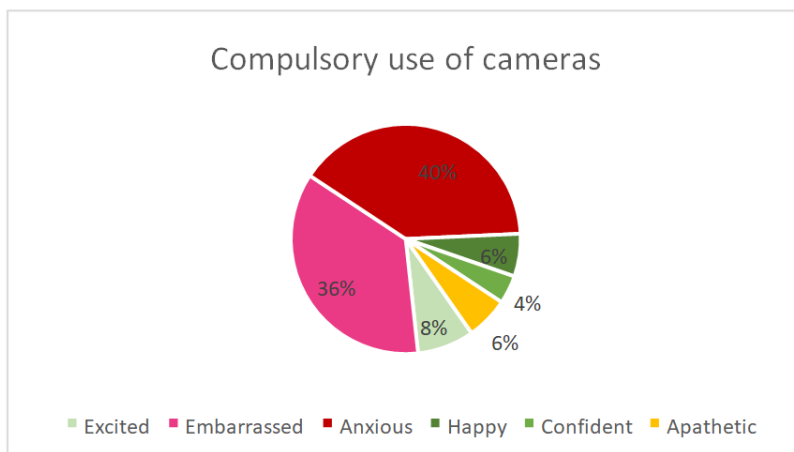


Figure 4.1. Compulsory use of cameras

Figure 4.1 illustrates that most students have negative feelings towards compulsory use of the cameras when learning online. 40% reported feeling anxious followed by 36% who felt embarrassed. Interviews revealed that students felt anxious knowing that teachers would penalize those who did not turn on their cameras as well as those who did but showed signs of inattention. Many reported feeling embarrassed as a result of their peers seeing their less-than-ideal living conditions or their private space as most students would study from their bedrooms. On the other hand, 8% and 6% of students were excited and happy to turn on their cameras, being able to see their friends' faces and expressions. Only 4% stated that they felt confident turning on their cameras, showing their faces and living spaces. Those who performed well in the class also reported feeling confident on camera, being seen and addressed by their teachers. While some teachers permitted students to keep their cameras off so long as they stayed in class, most made the use of cameras compulsory in their online classrooms in order to monitor students' attendance and attention.
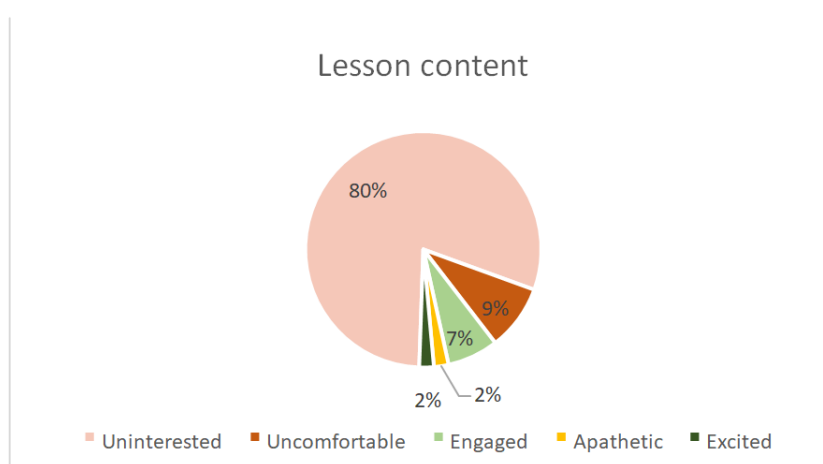


Figure 4.2. Lesson Content

Figure 4.2 shows that a vast majority of students, namely 81%, were uninterested in their online class contents. These students felt overwhelmed and desensitized by a large amount of information thrown at them daily, in the form of mundane slides. Most felt that teachers failed to put in the necessary efforts to present the subject matter in new and engaging ways. Still, 7% of students found their online classes to be engaging and 2% even found them to be exciting when teachers used well-made presentations incorporating pictures, videos, or live demonstrations. Additionally, incorporating interactive activities can also increase engagement. In their interviews, most students lamented the lost opportunity of learning alongside their peers. While a well-prepared presentation on the screen is appreciated, one student echoed the sentiment of many in saying that "it is not enough." Students expressed the need to learn in group settings, "with real people and real discussions". Online learning that did not incorporate these in-person elements made for lackluster learning. To make matters worse, demanding attention, teachers had resorted to disciplining the students through a point system or forcing them to keep their cameras on at all times. While this approach may successfully prevent students' attention from straying, it took away from the joy of learning, exacerbated stress, and led to online learning burnouts.

9% felt uncomfortable during class, citing ineffective equipment and a poor learning environment. This last finding also emphasized the importance of ensuring that online learning is accessible to all, as the lack of appropriate devices and means to learn from home meant some students' primary emotion to learning might be discomfort as opposed to any kind of engagement

at all with what was being taught. According to the online survey, 63% of the respondents felt well supported by their families in terms of devices' internet connection.
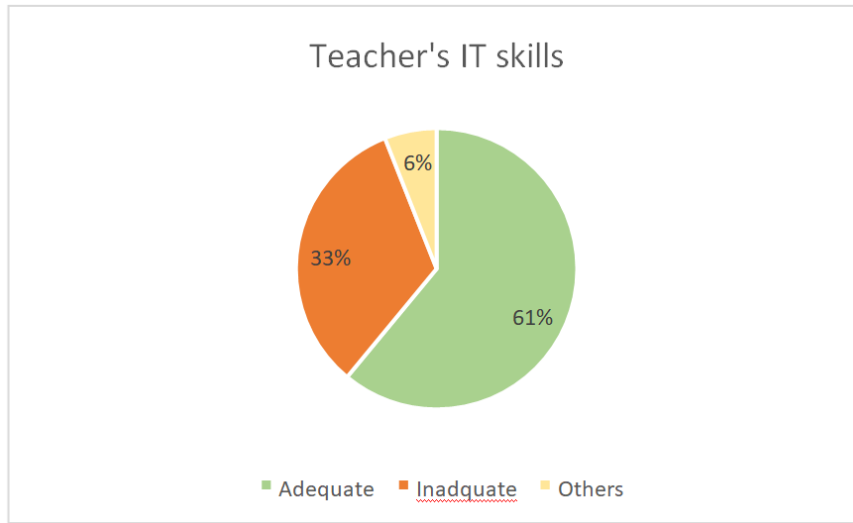


Figure 4.3. Teacher's IT skills

Figure 4.3 shows that at 61%, the majority of students believed most or all of their teachers to have adequate IT skills and/or readiness, while 33% believed most teachers did not. The 6% who chose 'other' further elaborated that they felt the numbers of skilled and unskilled teachers were similar. This result suggested that, even within the same school, there was a wide range of IT skill levels among the teachers. Students reported complicated class attendance rules as different teachers choose to use different meeting platforms. Some may not have the IT training necessary to manage an online classroom by themselves resulting in disjointed lessons or at the very least ones where the online learning platform's capabilities were not used to the fullest. Students also noticed that some teachers did not have stable internet connectivity and often disconnect from time to time during class.
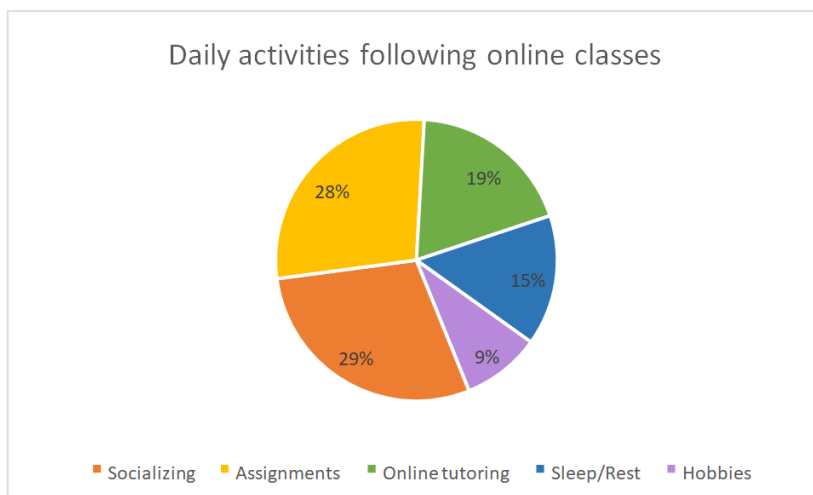


Figure 4.4. Daily activities following online classes

Figure 4.4 shows that following their online lessons, 29% of students socialized with their friends online or used social media. This is consistent with the majority of students sharing that they missed in-person interaction with their friends, but could only substitute for it by doing so on social media. In addition, students complained of having a large number of assignments due each day. This was reflected in the 28% of students who spent the majority of their evenings on assignments. 15% chose to rest or sleep right after class, while 9% looked to their hobbies to recover from both physical and mental exhaustion. Still, the majority of students shared during interviews that they did not feel they had enough time to relax or unwind before the next day. They also did not have time to prepare for their university applications, which are particularly crucial for grade 11 and 12 students. As such,19% of students chose to take online tutoring lessons after class in order to prepare for university entrance examinations. In any case, 76.8% of the students believed they were able to manage their time wisely with good planning strategies and organizational skills.

## 4.5. Students' Reflection on the Thai Educational System and its Management of Online Education

Students were proactive in their effort to adapt to the sudden shift to online learning. However, they were also frustrated by the poor management and organization of the online programs being provided. Inequality means online learning is not accessible to all students. There are families that do not have adequate capacity to support their children's online education be it in providing electronic devices, internet, supervision, or even a suitable home environment to learn in. In families with many children, this burden is only multiplied. Economic instability during the pandemic means many parents are now unemployed. Scholarships to help low-income families are only available depending on individual schools and their policies. One-on-one interviews revealed one theme less emphasized by the online survey; inequality meant online learning is not accessible to all students. Students were made acutely aware of the socio-economic disparity amongst themselves through online learning. Some families may not have the capacity to support their children's online education be it in providing electronic devices, internet, supervision, or even a suitable home environment to learn in. In families with many children, this burden is only multiplied. Economic instability during the pandemic means many parents are now unemployed, but information on financial aid is not readily available both from the government and schools.

In one interview, a student shares that "the Thai educational system doesn't support students, parents, and teachers as much as it should." During the pandemic, students and teachers alike must adapt to new ways of learning and teaching. Some struggled on the way to making the shift, but many students and teachers are still left behind with no access to devices, stable internet, technological skills, or training. Nevertheless, students still tried to turn the crisis of COVID-19 into an opportunity to grow. Those in grades 7-9 who wished to enter a new school had prepared so by looking outside their curriculums - purchasing textbooks to study by themselves, practicing admission exams, or taking online tutoring courses, in hope of transferring to a new school with better learning environments. Meanwhile, grade 10-12 students struggled to prepare for universities with limited guidance from teachers who were equally struggling to master online teaching. As admission requirements are changed almost annually, students must educate themselves on the application process and prepare as early as possible. From choosing the right course and university for themselves, preparing for all the necessary exams to putting together a strong application, the process had left many students feeling overwhelmed and unsupported by their teachers and schools during the pandemic. Nevertheless, students tried their best to prove to themselves that their learning had progressed despite the hindering effects of the pandemic.

## 5. CONCLUSIONS AND RECOMMENDATIONS

COVID-19 has thrust schools, teachers, parents, and students alike into a new makeshift world of online learning with little preparation. As such, it is no surprise that there remain many kinks in the system that need to be worked out. This study investigates high school students' experiences and evaluations of online learning, naming both advantages and disadvantages compared to in-school learning. On the one hand, students from resourceful schools, with sufficient equipment and access to high-quality teachers will stand to reap the full benefits of online learning, be it the convenience and the more customizable nature of the platform. On the other hand, students with limited access to the same resources stand to lose some opportunities to learn effectively during this vital period of their education. For either group, COVID-19 requires students to make major changes in the way they learn and socialize. This burden on the physical and mental wellbeing of students cannot be overlooked and support systems need to be put in place both at home and in school.

The interviews conducted show that students are quickly learning from previous years' experiences and constantly evaluating the benefits and drawbacks of the online curriculum provided by their school. As a result, when it comes to improving online learning, students are a mine of knowledge. While some commend the extra free time, they gain from cutting down on commuting to and from schools daily, others complain of that time being taken by schedule and assignment overload. In the area of academics, some report learning benefits such as having more time to review their lessons at their own pace, while others complain of low-quality lectures provided by their teachers.

All in all, it is evident that online learning can either be a curse or a blessing, depending on its structure and management. Schools, teachers, and students must come together in sharing their struggles, evaluations, and recommendations to improve learning efficacy during the pandemic.

First and foremost, schools should be the official point of contact between students and the necessary governmental organizations, advocating for students with financial needs, ensuring that all students can afford online learning. For those who cannot, financial aids, devices, or any necessary teacher support should be provided. Additionally, schools must also advocate the government for their students' wellbeing, especially those who cannot access vaccines easily.

The majority of students suggest improving the teaching quality. Teachers should make more engaging presentations, fully utilizing the interactive capabilities of online learning platforms. The school must organize adequate training for teachers, allowing all of them to share knowledge and tips on creating a good online lesson, be it in regards to the use of technology or style of teaching.

Moreover, the school greatly help teachers communicate with each other as a whole in order to plan class, grading system, and assignment schedules that are practical and well-balanced for students, taking into consideration the physical and emotional burdens the pandemic has placed on students. Schools should further organize regular meetings between teachers and parents, in order to best understand how students are coping at home and in class and what measures should be in place to help support them. To help lessen the load of the overly packed schedule, students suggest that some subjects such as PE or music may be put on hold until they can return to school or perhaps reduced to weekly hours. Ideally, students would like the option of choosing to spend more or less time on different subjects in accordance with their interests and educational goals.

Basic rules of online classroom conduct should be set on a school basis, rather than left to individual teachers. Specifically, rules that students feel are insensitive to their privacy, such as

those requiring their cameras to be on at all times or that they add their teachers on their personal messaging apps should be open to school-wide discussions and up for reconsideration of students' petition for it. Moreover, online exam-taking rules should be discussed between students and teachers in order to find an agreed upon format that is practical as well as fair for all students.

As we inch closer to the two-year mark of life during COVID-19, students are eager to return to schools while trying their best to adapt to learning online. The evaluation of these advantages and disadvantages can lead to new progress in technologies, education, and social media, resulting in a new normal for learning and teaching and also for a generation of students. As such, governmental organizations, schools, teachers, parents, and students must come together in an effort to help one another best adapt during this trying time.

## ACKNOWLEDGEMENTS

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