

# INSTRUCTIONAL PRACTICES OF SECONDARY TEACHERS AND STUDENTS DURING COVID-19 PANDEMIC

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## **Abstract**

*COVID-19 pandemic can make school and instructional practices at risk. The purpose of this research was to study the teaching and learning activities through an online classroom. The research approach used in this research is a quantitative research approach. The research design used in this study was a survey research design. The type of survey used was a cross-sectional survey design. The choice of a cross-sectional survey design was carried out to measure the behaviour of a number of populations through a sample regarding the level of integrity of the teaching and learning process*

*using online classrooms as a variable in the study. The informants were 23 teachers and 146 students from one secondary school, Mahasarakham province, Thailand. Data were obtained in Semester 2 Academic Year 2020. A questionnaire about online learning was used for data collection through Google form. Mean and standard deviation was employed for data analysis. Findings showed that teachers and students had opinions are at fluctuating level. Some opinions may need discussion for online learning by enhancing technological skills, reskill or upskill in field of educational technology are required for effective instruction.*

**Keywords:** COVID-19, Instruction, Online Classroom, Technology Education

### **Abstrak**

*Pandemi COVID-19 dapat membuat sekolah dan praktik pembelajaran berisiko. Tujuan dari penelitian ini adalah untuk mempelajari kegiatan belajar mengajar melalui kelas online. Pendekatan penelitian yang digunakan dalam penelitian ini adalah pendekatan penelitian kuantitatif. Desain penelitian yang digunakan dalam penelitian ini adalah desain penelitian survei. Jenis survei yang digunakan adalah desain survei cross-sectional. Pemilihan desain survei cross-sectional dilakukan untuk mengukur perilaku sejumlah populasi melalui sampel mengenai tingkat integritas proses belajar mengajar dengan menggunakan ruang kelas online sebagai variabel dalam penelitian. Informan penelitian adalah 23 guru dan 146 siswa dari satu sekolah menengah pertama di provinsi Mahasarakham,*

*Thailand. Data diperoleh pada Semester 2 Tahun Ajaran 2020. Pengumpulan data dilakukan dengan angket tentang pembelajaran online melalui Google form. Rata-rata dan standar deviasi digunakan untuk analisis data. Temuan menunjukkan bahwa guru dan siswa memiliki opini yang berfluktuasi. Beberapa pendapat mungkin perlu didiskusikan untuk pembelajaran online dengan meningkatkan ketrampilan teknologi, diperlukan reskill atau upskill di bidang teknologi pendidikan untuk pengajaran yang efektif.*

**Kata Kunci:** *COVID-19, Pengajaran, Online Classroom, Pendidikan Teknologi*

## **Introduction**

Normal situation without COVID-19 pandemic is a school-based arrangement that focuses on on-site learning activities. Now we have to live and learn in new normal situation, technology-enhanced learning, learn from home, and stay at home are now shaping our lives. Education needs adaptation for all children, teachers have to learn how to implement instructional strategies (Wargadinata et al., 2020). Teacher prepares lesson for achieving students in knowledge in order to planned curriculum, but flexible

for students. Teachers and students can participate learning activities, discuss questions in class, do an active learning, help students connect knowledge or create their own knowledge (Bali & Musrifah, 2020; Tanveer et al., 2020). By taking it into action through materials or learning activities that are guided by teachers. Teachers stimulate or facilitate the learning process from school to home, students have self-management in according with online lessons. It may be made a meaningful learning and easy to access by all students in effectively.

As we know, COVID-19 pandemic influence to all human activities including education. Learning should not be stopped at this moment, online learning is an alternative way to help students learn and work from home (Adnan & Anwar, 2020; Daniel, 2020; Livari et al., 2020). Learning from home enables students safe and serve, knowledge delivery, and anytime anywhere access by self (Rahman et al., 2019; Onyema et al., 2020). However, some educators have anxiety with inequity of learning in this pandemic era because different technology cannot response all students. Methods and tools for active

online learning should be discussed in what and how students learn? Students can learn by themselves from various actions. Therefore, teaching in a normal situation will be a learning arrangement that occurs primarily in class or in school (Churiyah et al., 2020). Teachers and students learn together through the teaching materials and learning processes designed by teachers.

Information technology has played an important role as a tool in the development and has been applied to online learning. Teaching and learning seem to be distanced that teacher and students do not need to go to school during COVID-19 outbreak (Chick et al., 2020). Teachers and students must switch from classroom to online, adapt to an unfamiliar way of life. That is, teachers need more time to prepare their lessons and reskill for online instruction. Even though students get homework and learn more time for themselves than they do in class. But teachers and students' interactions have not diminished. The learning community still exists, but the area of learning moved from school to smartphone or computer (Bali & Ruzifah, 2021; Hebebcı et.al., 2020).

Online learning can be effective for all students that it relies on a number of factors, including technological readiness, teacher readiness in new teaching, and the readiness of families and students to learn from home.

The COVID-19 pandemic affects teaching and learning activities around the world, with many teachers and students affected by school closures because schools are at very high risk of spreading. Schools must be closed to reduce the risk of spreading which has a significant impact on classroom (Aliyyah et al., 2020; Esposito & Principi, 2020). Students are not allowed to attend school and no stop learning in this period. Therefore, it is necessary to do everything possible to ensure that the teaching and learning can be conducted as efficiently as possible as the environment (Bali & Holilah, 2021; Smoyer et.al., 2020). The concept of knowledge delivery from teacher to students had launched through online learning. However, we have not yet known how to manipulate online learning for students in appropriate way. Teachers play an important role in managing learning for students', that is necessary to adapt and develop online environment

based on students' knowledge and meet the needs of their students.

This change is a huge challenge for teachers and students to adapt and learn which is a problem and a barrier to change in pandemic era. At the same time, it enables teachers and students to learn in alternative way, developing educational technology that forms the basis of future learning. This research investigates instructional practices of secondary teachers and students during pandemic era from one school in Mahasarakham province, Thailand. The findings will be useful for development suitable active online learning. It may find the feedback and necessary guideline for educators to implement active online learning as well.

## **Method**

The survey method is employed in this study. The research approach used in this research is a quantitative research approach. The research design used in this study was a survey research design. The type of survey used was a cross sectional survey design. The choice of a cross

sectional survey design was carried out to measure the behavior of a number of populations through a sample regarding the level of integrity of the teaching and learning process using online classrooms as a variable in the study. The informants consisted of 23 teachers and 146 students from one lower secondary school, Mahasarakham province, Thailand. Data were obtained in Semester 2 Academic Year 2020. They are willing to participate surveying in January 2021.

The research tools are questionnaires of students and teachers toward instructional practices through online environment during COVID-19 pandemic. Each questionnaire consisted of 20 items, which are scaled by 4-level (4-very high; 3-high; 2-low; 1-very low). The researchers conducted additional interviews with a semi-structured interview to be used as supporting information from the above feedback inquiries.

The researchers collected the data by handing out questionnaires through Google form. The researchers examined the accuracy and integrity of the data, then analyzed the data using basic statistics such as frequency,

percentage, mean, and standard deviation. The average score earned against the opinion level is as follows:

**Table 1. Average Score Earned Against The Opinion Level**

Mean Score of 3.51-4.00	means	Very High Level
Mean Score of 2.51-3.50	means	High Level
Mean Score of 1.51-2.50	means	Low Level
Mean Score of 1.00-1.50	means	Very Low Level

The data from the analysis is used to group the issues and present them in essays to explain the students and teachers about online instruction during the COVID-19 pandemic.

## **Results and Discussion**

### *Students and Online Learning*

The opinions of student towards instructional practices via online learning found that they had high level. But some items are rather low level and need to be discussed. The top 3 items are at high level by arrangement can be listed: I can communicate freely with my friends through online, Teacher takes good care of my lesson, and Teachers can provide good advice on online

learning. More details of each items can be shown in Table 2.

**Table 2. Students' Opinions Toward Online Learning**

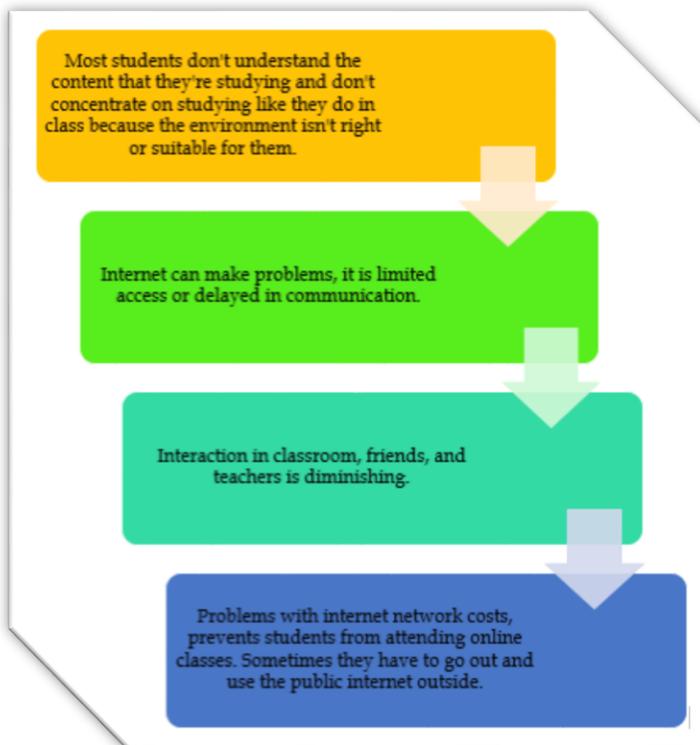
Item	Mean	SD	Level of Opinion
I think that despite being studying at home, I do group activities like a normal classroom	2.45	0.76	Low
I feel that each activity takes close to a normal class	2.66	0.81	High
I feel free to express my opinion through online learning	2.86	0.80	High
I participate in online classes such as Q&A, discussion, suggestions, timely submissions	2.91	0.81	High
I have less stress than studying at school	2.42	0.88	Low
I can learn lessons on my own	2.45	0.84	Low
I can make my own home work	2.71	0.78	High
I can communicate freely with my friends through online	3.18	0.74	High
I can learn something new based on my interests more than at school	2.77	0.77	High
I can work and send worksheet to teachers via online	2.98	0.85	High
I can communicate with my friends same as studying at school	2.95	0.86	High
I can regularly contact and consult with teachers	2.80	0.82	High
Teacher takes good care of my lesson	3.12	0.73	High
Teachers can provide good advice on online learning	3.01	0.74	High
Teachers can organize teaching activities online	2.85	0.79	High

<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Level of Opinion</b>
I have the availability of online instructional equipment	2.82	0.72	High
I have an intention to teach online	2.88	0.70	High
I love learning at a wide variety of online media	2.60	0.82	High
I developed my online learning skills	2.74	0.74	High
<b>Total</b>	<b>2.77</b>	<b>0.73</b>	<b>High</b>

Students have the most opinions in at high level even though the pandemic period. Also, the learning environment is changed from school to home by self-management in knowledge construction. The top 3 items which they have low level can be listed. I have less stress than studying at school, I think that despite being studying at home, I do group activities like a normal classroom, and I can learn lessons on my own. The opinion in the low level cannot be considered that negative position because they have less stress than studying at school. It may be that they feel comfortable to do and learn from home, no waste time for preparation and travelling to school. It is not quite sure that they can

access online activity or quality of internet of individual can be used.

However, opinion towards item I do group activities like a normal classroom, and I can learn lessons on my own, it shows a negative opinion that online learning cannot response their needs same as traditional classroom. They need face to face or group activities in classroom more than virtual face to face. Some activities need real life working and group interactions that is nature of interactive learning. To prove that, researchers interview students' opinion towards online learning about influences of COVID-19 outbreak and learning activities. It can be summarized as in below.



**Picture 1. Summarized Students' Opinions Toward Online Learning**

To advantages and disadvantage about online learning they express that it can decrease risk of spreading, safer than crowded in school, have used technology to communicate with teachers and friends, can learn new things based on own interests, be free to study,

and save the cost of going to school. On the other hands, most students do not understand the lesson, some learning material is used and unclear to explain, all subjects, there are more assignments in the class, in some subjects where co-teaching employed that two teachers do not communicate mismatch and assign overwork.

As a result, students are concerned and stressed, afraid of failing to deliver their jobs and being deducted from their grades. Online learning at home requires parents to work at home, so they can't manage their time and getting a delivery lesson on time (Wijaya et al., 2020). They are enthusiasm for admission is diminishing, as online learning at home does not have teachers as stimulating as in the classroom (Rulandari, 2020). Students are unable to work as a group job because online learning at home prevents them from joining together. If the duration of online classes, which in some subjects exceed the schedule. It feels bored and tired if teachers spend too long duration on teaching period. Students prefer to study in class due to it makes them more concentrated and not as boring as studying online at home.

### *Teachers and Online Teaching*

Teachers express their opinion about online teaching in variety items. It found that they had high level of opinion, but a fluctuating is reported between high and low levels. The 3 top items in high level can be listed: I can assign a work sheet to a student via online, I am intent on teaching online, and I can assign students online. More details of each items can be shown in Table 3.

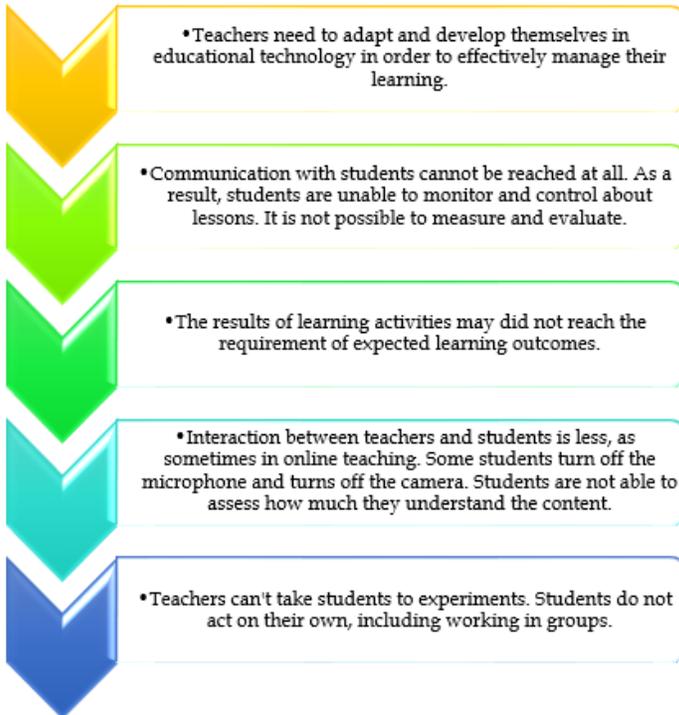
**Table 3. Teachers' Opinions on Online Teaching**

Item	Mean	SD	Level of Opinion
I love online teaching	1.91	0.58	Low
I can engage students in online teaching	2.61	0.64	High
I can organize active learning activities online	2.39	0.64	Low
I felt there was more opportunity to make my own decisions than regular teaching	2.30	0.55	Low
I have less stress than regular teaching	2.65	1.00	High
I can learn to design lessons by myself	2.91	0.72	High
I can assign a work sheet to a student via online	3.48	0.50	High
I can communicate freely with students via online	2.83	0.70	High
I was able to learn something new based on my interests	3.04	0.69	High
I can assign students online	3.26	0.74	High

<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b>Level of Opinion</b>
I can communicate with students in such at school	2.39	0.82	Low
Students can regularly contact and consult with teachers	2.65	0.81	High
Teachers can take good care of their students' learning	2.35	0.81	Low
Teachers give you good online learning advice	2.61	0.87	High
Teachers can organize teaching activities online	2.46	0.84	Low
I have the readiness of online teaching equipment	2.74	0.67	High
I am intent on teaching online	3.35	0.56	High
I have great control over the time of online teaching activities	2.78	0.59	High
I developed my online teaching skills	300.	0.72	High
I have developed a new form of communication skills	2.63	1.02	High
Total	2.72	0.83	High

The result showed that teachers have level of opinion towards online teaching at high level. But the low level of their opinion towards online teaching can be listed in 6 items: I love online teaching, I felt there was more opportunity to make my own decisions than regular teaching, teachers can take good care of their students' learning, I can organize active learning activities online, I

can communicate with students in such at school, and teachers can organize teaching activities online as it in the following. These are stress about online instructional practices, especially the mean of lowest opinion that teachers express, “I love online teaching” that reflect to them in negative response because teachers have unfamiliarity with new normal of learning environment (Akarawang et al., 2015; Marpa, 2021). More interviewing about teaching during COVID-19 outbreak can be summarized.



**Picture 2. Summarized Teacher Opinions Toward Online Learning**

However, the advantage and disadvantage can be discussed that teachers and students are not in a hurry to leave the house, reducing travel time. Teachers can teach anywhere, manage time freely (Beach, 2018; Fauzi & Khusuma, 2020). There is more time to prepare teaching

and teaching materials. Teachers have developed themselves in the use of educational technology, they continue to use different technologies alongside teaching at the school (Wei & Chou, 2020). Also, students can watch video on demand until they understand. Teachers have to employ technology with pedagogy engaging students in the online lesson as well as modern classroom (Nuangchalerm, 2020). Because teachers are key role to help students success in the learning achievements.

On the other hands, if technology skills aren't enough, it's not going to be enough to manage to learn. Internet and the availability of each student have limitations to access the educational resources. Some students' home environments may not be suitable for online learning, as they also need to help with their parents' work or do their homework as usual. Students rarely attend classes, which online classes can be a way for some students to take advantage of the opportunity to not attend. Teachers don't know if each time a student learns the full knowledge because they don't interact, they don't answer questions. Teachers can't follow, which also

depends on the student's responsibility. The readiness is required for them to understand how to use technology for education, make it be positive use for learning in the new normal education (Nuangchalerm et al., 2020).

### **Conclusion**

Based on the results of the study, it showed that teachers and students had opinions are at fluctuating level. Some opinions may be need discussion for online learning by enhancing technological skills, reskill or upskill in field of educational technology are required for effective instruction. This information can be used as a way to design learning management that suitable to the needs of students in the current situation. Technology will play a more educational role as a new way of life. The preparation and readiness of teachers and students in the new normal education should be designed and bring technology to enhance learning together.

## REFERENCES

- Adnan, M., & Anwar, K. (2020). Online Learning Amid the COVID-19 Pandemic: Students' Perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51.
- Akarawang, C, Kidrakarn, P, & Nuangchalerm, P. (2015). Enhancing ICT Competency for Teachers in the Thailand Basic Education System. *International Education Studies*, 8(6), 1-7.
- Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The Perceptions of Primary School Teachers of Online Learning During the COVID-19 Pandemic Period: A Case Study in Indonesia. *Journal of Ethnic and Cultural Studies*, 7(2), 90-109.
- Bali, M. M. E. I., & Holilah, N. (2021). The Role of Foster Caregivers in the Effectiveness of Online Learning in Pesantren. *Edukasi Islami: Jurnal Pendidikan Islam*, 10(1), 339-362.

- Bali, M. M. E. I., & Musrifah. (2020). The Problems of Application of Online Learning in the Affective and Psychomotor Domains During the Covid-19 Pandemic. *Jurnal Pendidikan Agama Islam*, 17(2), 137-154.  
<https://doi.org/https://doi.org/10.14421/jpai.2020.172-03>
- Bali, M. M. E. I., & Ruzifah, D. (2021). Mitigation of Student Deviant Behaviour through Al-Ghazali's Perspective Spiritual Values in the Disruptive Era. *Jurnal Pendidikan Progresif*, 11(1), 63-76.  
<https://doi.org/10.23960/jpp.v11.i1.20210>
- Beach, P. (2018). Examining Elementary Teachers' Use of Online Learning Environments: An Exploratory Study. *Journal of Research on Technology in Education*, 50(1), 34-47.
- Chick, R. C., Clifton, G. T., Peace, K. M., Propper, B. W., Hale, D. F., Alseidi, A. A., & Vreeland, T. J. (2020). Using Technology to Maintain the Education of Residents During the COVID-19 Pandemic. *Journal of Surgical Education*, 77(4), 729-732.

- Churiyah, M., Sholikhan, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia Education Readiness Conducting Distance Learning in Covid-19 Pandemic Situation. *International Journal of Multicultural and Multireligious Understanding*, 7(6), 491-507.
- Daniel, J. (2020). Education and the COVID-19 Pandemic. *Prospects*, 49(1), 91-96.
- Esposito, S., & Principi, N. (2020). School Closure During the Coronavirus Disease 2019 (COVID-19) Pandemic: An Effective Intervention at the Global Level?. *JAMA Pediatrics*, 174(10), 921-922.
- Fauzi, I., & Khusuma, I. H. S. (2020). Teachers' Elementary School in Online Learning of COVID-19 Pandemic Conditions. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 5(1), 58-70.
- Hebebcı, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of Views of Students and Teachers on Distance Education Practices During the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 267-

282.

- Livari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital Transformation of Everyday Life–How COVID-19 Pandemic Transformed the Basic Education of the Young Generation and Why Information Management Research Should Care?. *International Journal of Information Management*, 55, 102183.
- Marpa, E. P. (2021). Technology in the Teaching of Mathematics: An Analysis of Teachers' Attitudes During the COVID-19 Pandemic. *International Journal on Studies in Education*, 3(2), 92-102.
- Nuangchalerm, P. (2020). TPACK in ASEAN Perspectives: Case Study on Thai Pre-Service Teacher. *International Journal of Evaluation and Research in Education*, 9(4), 993-999.
- Nuangchalerm, P., Prachagool, V. & Dostál, J. (2020). Digital Learning of Pre-Service Teachers During COVID-19 Outbreak. *Journal of Technology and Information Education*, 12(2), 143-151.

- Onyema, E. M., Eucheria, N. C., Obafemi, F. A., Sen, S.,  
Atonye, F. G., Sharma, A., & Alsayed, A. O. (2020).  
Impact of Coronavirus Pandemic on Education.  
*Journal of Education and Practice*, 11(13), 108-121.
- Rahman, K., Wahid, A., Afandi, I., Bali, M. M. E. I., &  
Hakim, L. (2019). Effectiveness of Teams Teaching-  
Hybrid Learning (TTHL) in Higher Education.  
*WESTECH*, 1-6. <https://doi.org/10.4108/eai.8-12-2018.2284036>
- Rulandari, N. (2020). The Impact of the Covid-19  
Pandemic on the World of Education in Indonesia.  
*Ilomata International Journal of Social Science*, 1(4),  
242-250.
- Smoyer, A. B., O'Brien, K., & Rodriguez-Keyes, E. (2020).  
Lessons Learned from COVID-19: Being Known in  
Online Social Work Classrooms. *International Social  
Work*, 63(5), 651-654.
- Tanveer, M., Bhaumik, A., Hassan, S., & Ul Haq, I. (2020).  
Covid-19 Pandemic, Outbreak Educational Sector  
and Students Online Learning in Saudi Arabia.  
*Journal of Entrepreneurship Education*, 23(3), 1-14.

- Wargadinata, W., Maimunah, I., Eva, D., & Rofiq, Z. (2020). Student's Responses on Learning in the Early COVID-19 Pandemic. *Tadris: Journal of Education and Teacher Training*, 5(1), 141-153.
- Wei, H. C., & Chou, C. (2020). Online Learning Performance and Satisfaction: Do Perceptions and Readiness Matter?. *Distance Education*, 41(1), 48-69.
- Wijaya, T. T., Zhou, Y., Purnama, A., & Hermita, N. (2020). Indonesian Students' Learning Attitude Towards Online Learning During The Coronavirus Pandemic. *Psychology, Evaluation, and Technology in Educational Research*, 3(1), 17-25.