International Journal of Humanities Social Sciences and Education (IJHSSE)
Volume 9, Issue 12, December 2022, PP 148-154
ISSN 2349-0373 (Print) & ISSN 2349-0381 (Online)
https://doi.org/10.20431/2349-0381.0912018
www.arcjournals.org

COVID-19, Online Teaching Evaluation in Secondary School: the Case of Phuket, Thailand

Suntree Koedsin

P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Provincial Administration Organization, Phuket Thailand

Corresponding Author:** ***Suntree Koedsin, *P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Provincial Administration Organization, Phuket Thailand*

Abstract: *The global crisis caused by the COVID-19 pandemic has forced all educational institutions around the world to quickly switch to an online mode of teaching and learning. Online teaching is more convenient and suitable for the crisis, as it can provide a vibrant and dynamic teaching and learning environment. However, due to a time constraint, the process transformation was expected to be carried out rapidly even though insufficient preparation had been made for such an unanticipated crisis. Therefore, in this study, we examine the concept of online teaching, including its implementation and evaluation, in the context of a secondary school in Phuket, Thailand. The context, input, process, and product (CIPP) framework was used to evaluate the effectiveness of the adopted model, and qualitative data were collected. The interview and questionnaire responses, experiences, beliefs, and challenges encountered by the 3 administrators, 28 teachers, 14 school board members, and 212 students and their parents from P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Southern Thailand were used and analyzed. This study revealed the online learning assessment model developed through this method already met an excellent construct of loading factor values and had a reliability score above 0.60 (i.e., 0.60-1.00) and a Cronbach alpha coefficient above 0.70. Difficulties in implementing online learning include reliable internet connection (i.e., a package used that does not have enough speed and data to study for an extended period); inequality of devices used: Most students could use only one cell phone as a learning device (not a PC or Laptop and no printer), and a suitable environment and atmosphere for efficient delivery. The issue with teachers was that not all teachers were skilled in the use of technology and media in the implementation of online learning, so schools need to prepare and develop this knowledge and skill before beginning. The results of the online learning evaluation showed that no critical problems faced by the teachers in executing online teaching at P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Thailand. This study makes suggestions that can be used as guidance for future strategies and educational policies in Thailand and other countries. Furthermore, the results can also be used as a benchmark for evaluating online learning in similar contexts in other countries.*

Keywords: *online teaching, CIPP, COVID-19, Thailand.*

1. INTRODUCTION

The spread of the deadly infectious disease, the novel coronavirus (also known as COVID-19), was declared a pandemic by the World Health Organization (WHO) on March 11, 2020 (Cucinotta and Vanelli, 2020). Thailand was the first country to report a case outside China on January 13, 2020. Thailand has been affected by the COVID-19 epidemic, which had a severe outbreak from March to June 2020. The COVID-19 pandemic has posed great challenges to the field of education. In a time of health crisis, countries have implemented policies such as travel restrictions, closing borders, and closing schools to limit and reduce the spread of the virus. As a result, all schools were unable to teach normally (i.e., face-to-face). To reduce the risk of COVID-19 spreading, the Ministry of Education of Thailand is postponing the 2020 academic year to July 1, 2020, and then requiring schools to organize online teaching after one month has passed. Online teaching is a suitable teaching solution during the COVID-19 crisis and should not be classified as general online learning but rather than as a response to a national emergency.Online teaching in this situation can be called "emergency remote teaching," which is defined as an unexpected interim shift from face-to-face to the online teaching mode in response to a crisis(Hodges et al., 2020). Since the shift to remote or online teaching was quick and unanticipated, various studies reported different of difficulties and challenges.For example, Van der Spoel et al., (2020) studied teachers' online teaching expectations and experiences

during the COVID-19 pandemic in the Netherlands. Their study found that many educators experienced some difficulties when using distance learning technologies, as they were not familiar with them. While La Velleet al. (2020) found that English teachers exhibited some negative emotions, such as anxiety and panic, as they were can not well prepared for online teaching beforehand or in the beginning period. Several studies have underlined the significant of digital teaching competencies which can encourage teaching innovation and result in better learning outcomes (Tomte et al., 2015; Garzon Artacho et al., 2020; La Velle et al., 2020; Huang et al., 2021).The context, input, process, and product (CIPP) evaluation model is "a comprehensive framework for conducting formative and summative evaluations of programs, projects, and evaluation systems" (Stufflebeam, 2003). The emphasis of the model was to deliver the information that will help to regularly evaluate the program and services and make effective and efficient use of resources, time, and technology to help beneficiaries appropriately (Anh & Pang, 2021). The CIPP model approach is recommended by Hodges et al. (2020) to provide comprehensive information regarding the implementation of learning during the pandemic.Several studies used the CIPP model for evaluation the emergency online approach during COVID-19. Cahyadi & Widyastuti, (2022), who examined the ERT in Indonesia, reported that a change to the ERT process depends on both internal organizational resources (curriculum, staff development, and technology) and external challenges (lack of access to a fast, inexpensive, and reliable internet connection and the socioeconomic problem of the wide range in financial resources of the parents of the students), and ERT learning design needs to be framed using three principles: simplicity, flexibility, and empathy. The barriers to hybrid learning include the diversity of student residences, which contributes to the internet network signal issues was reported (Setiawan et al., 2021). Mohmmed et al., (2020), who utilized the CIPP model to evaluate the ERT at Middle East College Oman, reported that the smooth switch to online teaching with continuous monitoring of the ERT progress and issues is recommended. The use of online platforms, communication skills, class management, and the effective use of resources are reported as the competencies needed for Online-Merge-Offline (OMO) Learning (Huang et al., 2021).

This study aims to evaluate the online learning approach at P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Southern Thailand, after the cancellation of the physical classes due to COVID-19 outbreaks. The online learning was evaluated using the CIPP model of evaluation in terms of context, input, process, and product output. Data were collected through online tools using stratified random samples of students and their parents. Besides interview and questionnaire responses, experiences, beliefs, and challenges encountered by the educators, administrators, school board members, and students during the online teaching were used and analyzed.

2. Study Design and Participants

A multi-case methodology was adopted in this study. It focused on the experiences of school administrators, teachers, the board of the schools, students, and their parents in secondary school in Phuket, Thailand, in overcoming learning challenges during Covid-19 crises. Administrators, teachers, the school board, and students were interviewed and/or completed questionnaires to record their experiences, beliefs, challenges, and school policies regarding online teaching. The 28 teachers (100%), 14 school board members (100%), 212 students and their parents (stratified random sampling using the Taro Yamane formula) from P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Southern Thailand, were selected. Three administrators from other secondary schools in Phuket province were selected for context interviews since P.P.A.O. Bantaladnua (Wankru 2502) School had only one administrator at that time. In this emergency, no formal ethics approval was provided for data collection because of the emergency nature of the crisis did not allow for any such delays. The CIPP model method recommended by Hodges et al. (2020) was employed to assess the execution of online teaching during a pandemic. This study was conducted in four phases in terms of context, input, process, and product. In the first phase, the administrator, and teachers were interviewed using questions that addressed the needs, problems, opportunities, challenges, affordances, and compliance with public health policy based on individual considerations (Stufflebeam & Coryn, 2014). The teachers and students responded to a readiness survey and questionnaire consisting of questions about equipment readiness, experience using online teaching technology, the speed of the internet used, the study room environment, etc. In the second phase, input assessment designed to discover information regarding the program's strategy, action plan, staffing arrangements and development, and financial plan for feasibility and potential cost-effectiveness in

meeting targeted needs and achieving goals (Hodges et al., 2020). The third phase required a series of monitoring activities, documents, and reports on the implementation of online teaching plans. Of necessity, flaws were identified on an on-going basis to develop and improve the process. This process monitored the activities, time, resources spent on the project, leadership, etc. This phase involved 28 teachers and the administrator of P.P.A.O. Bantaladnua (Wankru 2502) School responded to the questionnaire. The fourth phase refers to the outcomes of the online teaching initiative, including quantitative results and course completion rates. Furthermore, quantitative data were obtained from 212 students and their parents, 28 teachers, 14 school board members, and administrators who responded on a 5-point Likert scale ranging from "excellent" (= 5) to "very poor" (= 1). Data from this stage were analyzed using descriptive statistical analysis.

Table1. *CIPP evaluation*

Phase	Semester/Academic Year	Assessments Topics	Participants	Tools
1(context)	Before the beginning of the semester (May 2021)	needs, goals, problems, opportunities, compliance with public health policy, and a readiness survey	Teachers, students, and administrators.	Interviews, questionnaire, and readiness survey.
2(input)	Beginning of the semester (May 2021)	program's strategy, action plan, teacher arrangements, and budget for feasibility and potential cost-effectiveness	Administrators, teachers, and board of school.	Questionnaire
3(process)	During the academic year (June 2021 - March 2022)	monitoring activities, documents, and reporting on the implementation of plans	Administrators and teachers	Questionnaire
4(product)	End of the academic year (March- April 2022)	outcomes of the online teaching initiative	Administrators, teachers, board of school, parents, and students	Educational Achievement Survey and Questionnaire

Source: *Adapted from (Cahyadi & Widyastuti, 2022)*

3. Results and Discussion

The COVID-19 outbreak has forced many schools around the world to transform their conventional classroom course learning (i.e., face-to-face teaching in a physical classroom) into online teaching in a short period of preparation time. Some countries are more familiar with distance education than others, for example Correspondence Schools are run by Departments of Education in Australian states for children living in remote parts of Australia. The methods for delivering teaching and conducting assessments have both changed significantly as a result of the crisis. Lessons learned from the early phase of the COVID-19 pandemic (which had a severe outbreak from March to June 2020) offered valuable input for school administrators and teachers in applying the full online teaching mode (starting July 2020). The CIPP framework (Table 1) has four evaluation phases: context, input, process, and product. As shown in Table 1, each phase was progressive and is carried out at different times and with different methods. Emergency distance education was a very new experience in SE-Asia.

3.1. Context Evaluation

Based on focus group interviews of administrators and teachers, the results from interviews in the context of online teaching during the COVID-19 pandemic can be summarized as follows:

- A learning management system such as Google Classroom is important so that schools and teachers can include all students in their online classes. This tool will help teachers easily communicate with students and manage their classes.
- The online learning process will help reduce the spread of COVID-19, in accordance with the announcement of the Ministry of Public Health and the teaching and learning guidelines of

the announcement of the Ministry of Education.

- School had some lessons learned from the early stages of the COVID-19 pandemic that school administrators and teachers can apply to this phase.
- The students might easily lack focus during the online teaching due to the absence of eye contact, gestures, and the classroom atmosphere.
- Some students (and teachers for that matter) may experience a home environment that is not conducive to learning and teaching.
- The need to prepare courses or workshops for teachers' online learning technology development, such as how to use Google Classroom, Google Meet, Zoom, video recording, exams and assessments with online tools, communication methods, assignments, and scores, and so on.
- The fast, affordable, and reliable of the internet connection is the one of the keys successes of the online teaching.
- Multi-view cameras that can switch between media may be useful for the subject being demonstrated.
- The school should encourage students, teachers, and staff to get the COVID-19 vaccine quickly and monitor those who are infected; this information will be useful for management issues during the pandemic.

The results from readiness survey and questionnaire are revealed that the following issues:

- The most popular online platforms that teachers and students know and have used are Google Classroom, Google Meet, Line Group, and Zoom, respectively.
- The majority of students used their smartphones as learning devices and used the internet from their smartphones.
- Most students have a "good" (score of 4) environment for online learning, and some students (19%) have an "acceptable" (score of 3) environment for online learning.
- The majority of students have had "fair" prior experience with online learning even if they did not realize it.

The information in this process was used to prepare and develop the plan and standard operating procedures (SOP) for online teaching during the COVID-19 pandemic at the P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Thailand, to avoid the problems and difficulties that were observed in the context evaluation. The staff's development was performed for online learning platforms that assisted the teaching process, such as Google Classroom, Google Meet, Google forms, video recording, exams, and assessments with online tools, communication methods, assignments, and scores. Students are taught to use the tools that teachers use in teaching. The recorded videos are stored and shared via Facebook and Line groups for students and teachers to review.

3.2. Input Evaluation

The input evaluation process will provide information about the sources that can be used to implement online learning during COVID 19. The basic requirements were classified into five indicators: (1) Is the administrator planning enough to support online learning? (2) Teachers' arrangement (3) Were the learning media and equipment sufficient to handle the need for online teaching? (4) Were the technology infrastructure and learning resources sufficient to handle the needs of online teaching? (5) Was there enough budget to support online learning? This study found that the teachers, administrators, and board of school stated that "the school arranges teachers corresponding to the subjects taught" and "the management has clearly communicated the policies and guidelines for teaching and learning management under COVID-19," which fell into the category of "excellent." While teachers and administrators stated that "teachers joined the web pages, online communities, and online platforms to share ideas for teaching and learning with others," this fell into the category of "excellent." Teachers and administrators responded that "teachers have "moderate" online teaching

experience. While the board of school responded that the school has materials that can be used to facilitate the implementation of online teaching and learning, this fell into the category of "acceptable." This is due to the fact that teaching takes place at the students' homes, where not all equipment can be borrowed from the school. From the suggestion opportunity at the end of the questionnaire, the students responded that the speed of the internet is not the problem, but the price of a package that can be maintained at a speed that allows them to study online for a whole month is expensive. This reflects the students' financial difficulties caused by the COVID-19 pandemic, which has led to a sudden drop in income for the majority of Phuket's population who work in tourism-related jobs. The findings are in line with an (Cahyadi & Widyastuti, 2022) study that reported "internet speed instability" as a major issue for lecturers and students.

3.3. Process Evaluation

Process evaluation requires a series of monitoring activities, documents, and reports on the implementation of plans. A process analysis revealed some highlighted issues raised by respondents.

- The results of the process evaluation showed that the average value fell into the category of "good."
- The school planned online teaching methods as a policy in line with the situation of the COVID-19 outbreak, and its average value (4.52±0.50) fell into the category of "excellent."
- The school created the web pages through an online platform to promote learning so that students could access learning anywhere, anytime. The average value (4.55±0.50) fell into the category of "excellent."
- The school encouraged students to compete in academic skills competitions using various forms such as TikTok, video clips, drawing contests, and the Science Week event ("new normal" mode), with an average score (4.55±0.50) fell into the category of "excellent."
- The school required the teachers to use a multi-criteria assessment of learners that can be measured according to indicators and learning outcomes appropriately under the situation of the COVID-19, with an average value (4.58± 0.49) fell into the category of "excellent.".
- The school had clear plans or projects for supervising online teaching and learning during COVID-19, with an average value (4.68± 0.47) fell into the category of “excellent.”
- From the suggestion opportunity at the end of the questionnaire, the teachers faced some difficulty with the examination due to the problem of internet connection for some students, which made it a new examination with new questions. The reliable internet connection is common factors causing difficulties to teachers and students when they conducted online teaching (Mohmmed et al., 2020; Anh & Pang, 2021; Cahyadi & Widyastuti, 2022).

To make the online learning process go smoothly, the infection and vaccination information of all staff and students and student attendance information were monitored. By implementing the Phuket Sandbox policy, the school can coordinate with the provincial public health department to ensure staff and students are vaccinated. As a result, they quickly got the three vaccinated and supported the success of the online teaching process.

3.4. Product Evaluation

A product evaluation assesses the outcomes of the adopted method, which will assist us in mitigating the drawbacks of the adopted model in the future, such as its effectiveness deficiency, and focuses on the fulfillment (or not) of objectives (Stufflebeam &Coryn2014) and Mohmmed et al., (2020) stated that the product evaluation for the online learning in the COVID-19 situation is not important. In addition, as the shift to online learning usually occurs with unbelievable speed in a short period of time, the online learning in COVID-1 situation evaluation should focus on the context, input, and process rather than the product (learning) (Hodges et al., 2020). In this study, the product evaluation of the online teaching model at the P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Thailand, was conducted.

The product evaluation aimed to evaluate the impact of online teaching on students' interactions and

measure whether the pre-defined objectives of the adopted online learning model were achieved or not. The study also surveyed academic achievement of students and satisfaction of teachers, administrators, students, and parents. The outcomes of this analysis demonstrated that the teachers, administrators, students, and parents are "satisfied" (scores of 4.10 ± 0.67 and 4.30 ± 0.70, respectively) with the online learning outcomes. While the board of education was "very satisfied" with the online learning outcomes (scores of 4.63 ± 0.48). The students and parents were “satisfied” with their academic output (scores of 4.37 ± 0.48). From the academic achievement evaluation according to the school curriculum, it was found that 61 percent of students had a grade point average of 3 or higher, which was higher than the target set under normal circumstances. Assessment results of the Ordinary National Education Test of Grade 3 students in Thai language, mathematics, and English subjects were higher than the average of affiliated schools. While the assessment results of grade 6 students in the Thai language, mathematics, social studies, and English were higher than the national average value. Such results may demonstrate the effectiveness of online teaching implementations that can maintain students' learning outcomes.

The unexpected shift to online teaching influenced the quality of teaching to a certain extent. It in effect resulted in a revision of all teaching done at the school. The effectiveness of teaching and learning was based on cooperation and interaction among students and teachers, student engagement in the online class, timely response, and diverse learning activities (Chickenring & Gamson, 1987; Gorsky & Blau, 2009). As reported from past studies, the overall effectiveness of online educational knowledge and experiences is lower than in the case of conventional classes (i.e., physical face-to-face teaching) because it is difficult to ensure interaction and active learning (Mohamad et al., 2015; Atmojo & Nugroho, 2020; Tartavulea et al., 2020).

4. CONCLUSION

This study found that there were no significant problems faced by the teachers in executing online teaching at P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Province, Thailand. In terms of context and input, administrators and teachers properly understand the various problems and what is needed to make plans at the beginning of the semester based on previous experiences and results of context evaluations. Unlike the initial phase of school closure (March 2020), administrators and teachers were ready at the beginning of the semester in July 2020, as they had learned from the initial phase and were better prepared by using context evaluation as a part of the CIPP model, even though several technical difficulties were still found in online learning. Although Phuket is a pilot area for smart city projects and investing in 5G network infrastructure, it is still faced with the intermittent reliability problems of internet connection.This study makes suggestions that can be used as guidance for future strategies and educational policies in Thailand and other countries. Furthermore, the results can also be used as a benchmark for evaluating online learning in similar contexts in other countries unfamiliar with distance learning.

ACKNOWLEDGMENTS

A special thanks to everyone who took part in the interviews and filled out the questionnaires. Thank you, Assoc. Prof. Dr. Raymond James Ritchie, Prince of Songkla University, for English language editing. Thank you for your continued support, school board, and Phuket Provincial Administrative Organization.

REFERENCES

[1] Cucinotta, D., &Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Bio Medica: AteneiParmensis*, *91*(1), 157.

[2] Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). *The difference between emergency remote teaching and online learning*. Retrieved 15 February 2020, from https://www. designmantic.com/blog/infographics/good-book-of-colors/.

[3] Van der Spoel, I., Noroozi, O., Schuurink, E., & van Ginkel, S. (2020). Teachers’ online teaching expectations and experiences during the Covid19-pandemic in the Netherlands. *European Journal of Teacher Education*, *43*(4), 623–638.

[4] La Velle, L., Newman, S., Montgomery, C., & Hyatt, D. (2020). Initial teacher education in England and the Covid-19 pandemic: Challenges and opportunities. *Journal of Education for Teaching*, *46*(4), 596–608.

[5] Tomte, C., Enochsson, A.-B., Buskqvist, U., &Kårstein, A. (2015). Educating online student teachers to master professional digital competence: The TPACK-framework goes online. *Computers & Education*, *84*, 26–35.

[6] Garzon Artacho, E., Martínez, T. S., Ortega Martin, J. L., Marin Marin, J. A., & Gomez Garcia, G. (2020). Teacher training in lifelong learning—The importance of digital competence in the encouragement of teaching innovation. *Sustainability*, *12*(7), 2852.

[7] Huang, R., Tlili, A., Wang, H., Shi, Y., Bonk, C. J., Yang, J., & Burgos, D. (2021). Emergence of the online-merge-offline (OMO) learning wave in the post-COVID-19 era: A pilot study. *Sustainability*, *13*(6), 3512.

[8] Stufflebeam, D. L., McKee, H., & McKee, B. (2003). The CIPP model for evaluation: An update, a review of the model's development, a checklist to guide implementation. *Annual Conference of the Oregon Program Evaluators Network (OPEN), Portland, Oregon*, *10*.

[9] Anh, V. T. K., & Pang, V. (2021). The Application of CIPP Model to Evaluate Online Teaching for English Majored Programs in Vietnam During the Covid-19 Pandemic. *Journal of Institutional Research South East Asia*, *19*(2).

[10] Cahyadi, A., & Widyastuti, S. (2022). COVID-19, emergency remote teaching evaluation: The case of Indonesia. *Education and Information Technologies*, *27*(2), 2165–2179.

[11] Setiawan, R., Aman, A., Prasojo, L. D., & Mehta, K. (2021). Evaluation of hybrid learning in college using CIPP model. *Jurnal Penelitian Dan Evaluasi Pendidikan*, *25*(2).

[12] Mohmmed, A. O., Khidhir, B. A., Nazeer, A., & Vijayan, V. J. (2020). Emergency remote teaching during Coronavirus pandemic: The current trend and future directive at Middle East College Oman. *Innovative Infrastructure Solutions*, *5*(3), 1–11.

[13] Stufflebeam, D. L., &Coryn, C. L. (2014). *Evaluation theory, models, and applications* (Vol. 50). John Wiley & Sons.

[14] Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, *3*, 7.

[15] Gorsky, P., & Blau, I. (2009). Online teaching effectiveness: A tale of two instructors. *International Review of Research in Open and Distributed Learning*, *10*(3).

[16] Mohamad, S. N. M., Salleh, M. A. M., & Salam, S. (2015). Factors affecting lecturers motivation in using online teaching tools. *Procedia-Social and Behavioral Sciences*, *195*, 1778–1784.

[17] Atmojo, A. E. P., & Nugroho, A. (2020). EFL classes must go online! Teaching activities and challenges during COVID-19 pandemic in Indonesia. *Register Journal*, *13*(1), 49–76.

[18] Tartavulea, C. V., Albu, C. N., Albu, N., Dieaconescu, R. I., &Petre, S. (2020). Online Teaching Practices and the Effectiveness of the Educational Process in the Wake of the COVID-19 Pandemic. *Amfiteatru Economic*, *22*(55), 920–936.

AUTHOR'S BIOGRAPHY

Suntree Koedsin, is a mathematics teacher and vice director of the P.P.A.O. Bantaladnua (Wankru 2502) School, Phuket Provincial Administration Organization, Phuket, Thailand. She received a Bachelor of Science (mathematics) with second-class honors from Prince of Songkla University, Thailand, and she also received a postgraduate certificate of a Graduate Diploma (Education Management) from Phuket Rajabhat University, Phuket, Thailand. She participated in numerous training and workshop sessions on research methodology, management tools, and evaluation methods in the field of education.

Citation: *Suntree Koedsin. "COVID-19, Online Teaching Evaluation in Secondary School: the Case of Phuket, Thailand" International Journal of Humanities Social Sciences and Education (IJHSSE), vol 9, no. 12, 2022, pp. 148-154. DOI:* https://doi.org/*10.20431/2349- 0381.0912018.*