



Students' Acceptance of CIDOS 3.5 Utilisation (Facilitating Conditions) for Learning Communicative English During the COVID-19 Pandemic

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Abstract

The COVID-19 Pandemic has led to the change of traditional teaching and learning methods to fully online learning. Curriculum Information Document Online System (CIDOS) is one of the web-based applications to facilitate online learning. However, the usage of CIDOS during the Pandemic needs to be better understood. Thus, this research explores the impact of facilitating conditions on students' acceptance of CIDOS 3.5 for learning communicative English amidst the COVID-19 Pandemic. By investigating this relationship, the study aims to shed light on the factors that promote the successful adoption and utilization of technology for effective online learning. In this study, 100 fourth-semester students who were enrolled in the 'Communicative English 3' course and utilized CIDOS 3.5 as a learning tool during the COVID-19 pandemic were selected to participate. The research yielded positive results, indicating that facilitating conditions significantly influence students' acceptance of online learning platforms. Based on the positive results of the study, it is recommended that online learning platforms be designed to prioritize user-friendliness, with easily accessible technical support to ensure a positive user experience.

Keywords: - Covid-19, CIDOS 3.5, facilitating conditions

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1. Introduction

The widespread impact of COVID-19 on a global scale has greatly affected various aspects of life, including education, and Malaysia has not been exempted from this effect. Due to the COVID-19 pandemic, approximately 91.3 percent, or over 1.5 billion of the world's learners, are unable to attend school (Ardiansyah, 2020). Alternative approaches, such as e-learning from home, were developed to ensure that students could continue their education during this time. To thrive in an uncertain and demanding environment, learners must be prepared to excel in 21st-century skills and actively engage in problem-solving. This shift to online learning demonstrates how the use of the internet has altered habits and behaviors that were previously considered routine in face-to-face interactions.

Students would suffer emotionally and psychologically if they are abruptly cut off from their friends, educators, and the normalcy they rely on (Chung, Subramaniam, & Dass 2020). However, the current tertiary student population belongs to the Generation Z cohort, which comprises individuals born between 1995 and 2015 and has been significantly shaped by technological advancements. These students possess distinct learning preferences compared to earlier generations, as they prefer a more hands-on and personalized approach to learning. As a result, educators opt for interactive platforms and online forums to facilitate their involvement in the learning process.

The Curriculum Information Document Online System (CIDOS), an open-source learning management system (LMS), was introduced and is currently being utilized in polytechnics as an e-learning tool. The Ismail

et al., (2014) study found that the document management platform is fully automated and provides a range of functions, such as uploading, updating, and sharing digital content. Additionally, the platform enables online communication between instructors and polytechnic students, which promotes interaction and engagement in the learning process. Students can determine their learning methods when they have access to digital devices and the internet.

Online learning is particularly beneficial in catering to the specific learning needs of students, as highlighted by Norliana et al., (2020) and supported by Sukendro et al., (2020), who found that the availability of good facilities such as financial resources, infrastructure, human resources, and educational materials influences students' acceptance of online learning. This addresses a gap in the literature on students' perceptions and acceptance of online learning. Venkatesh & Bala (2008) define a facilitating condition as an individual's perception that an organizational and technical infrastructure exists to support the use of a system. When individuals perceive that the necessary resources are available and accessible, they are more likely to view the system as practical and easy to use, increasing their intention and willingness to use the system.

In an online learning environment, students have more responsibilities in their learning and must participate more actively, while instructors take on a more facilitative role. According to Rochyani & Arif (2020), students' concerns about teacher performance in online courses are centered on communication, with fast responses from instructors being the most valued interaction. Another study by Toquero (2020) and Mo et al., (2020) found that students prefer online courses that provide high-quality materials, offer professionally meaningful assignments, and deliver high-quality feedback.

To meet the needs of students using CIDOS 3.5, it is important to explore ways to enhance online learning effectiveness. This includes investigating how facilitation factors can impact the ability of CIDOS to function effectively for Communicative English students during the Pandemic. Mailizar et al., (2020) emphasize the importance of gathering students' perspectives. Future research should focus on assessing students' viewpoints on remote learning to understand their challenges better.

2. Literature Review

2.1 The Utilisation of CIDOS in Polytechnics.

The Malaysian government initiated the first phase of the Movement Control Order (MCO) on March 18, 2020. As a result, all educational institutions, including primary and secondary schools, were urged to adopt online tools such as Google Classroom, Zoom, and Microsoft Teams for remote teaching and learning. To ensure that schooling could continue uninterrupted, alternative methods such as e-learning from home were introduced.

CIDOS, an open-source learning management system (LMS), was introduced in 2011 and was initially used as an e-learning medium in polytechnics (Ahmad &

Mohamed, 2017). Despite its goal of preparing students for self-directed learning, its practical application remains limited (Semana et al., 2019). However, CIDOS has been included as one of the online tools available for assisting online learning in polytechnics throughout Malaysia. As a result, CIDOS 3.5 has been updated with BigBlueButton Plugins, which were officially implemented in April 2020. BigBlueButton is an open-source web conferencing tool designed for online learning, which enables users to share audio, video, slides, a whiteboard, chat, and a computer screen in real time. Adam et al., (2020) agree that CIDOS 3.5 is a flexible platform enabling teaching and learning to occur anytime and anywhere without being restricted by the class schedule or physical presence. This feature is handy during the Covid-19 pandemic when students and teachers cannot attend classes in person; educators can deliver instruction and engage with students remotely, ensuring that learning can continue uninterrupted despite physical or time constraints.

According to Bangga et al., (2021), the features of CIDOS 3.5 make it easier for students to access their learning materials and complete their assessments. Furthermore, facilitating conditions are crucial for lecturers and students, as Al-Rahmi et al., (2021) and Adam et al., (2021) noted. CIDOS 3.5 facilitates online teaching and learning by enabling efficient control over curriculum documents, teaching and learning materials, and interactive communication between lecturers and students (Mohamad et al., 2021; Razali & Shahbodin, 2014). These studies demonstrate that the use of CIDOS 3.5 has resulted in significantly favourable facilitating conditions in terms of learning resources, flexible and personalized learning, and learning schedules.

2.2 Social-Constructivism Theory

Socio-constructivism is a learning theory that emphasizes the social and cultural aspects of learning based on the work of Lev Vygotsky, a Soviet psychologist, and his idea that learning occurs through social interactions and collaborative processes. According to socio-constructivism, knowledge is not something that is simply transmitted from teacher to student. Instead, it is constructed through the interaction between individuals and their environment.

The zone of proximal development (ZPD) is a concept introduced by Vygotsky (1978) in his socio-constructivist learning theory. It refers to the difference between what a learner can do independently and what they can do with guidance or assistance from a more knowledgeable person, such as a teacher or peer (Kurt, 2020). ZPD is the area where learning occurs, as it is the gap between a learner's current level of knowledge or ability and their potential to learn with support. Vygotsky believed teachers and more knowledgeable peers could scaffold a learner's progress by providing guidance and support in the ZPD.

It is still relevant and applicable to the modern age, even with the increasing use of technology in learning. The learner is "taught" by technology. Online tools can provide personalized learning experiences that adapt to

each student's needs, interests, and learning styles. Teachers can still play a critical role in facilitating learning by using technology to identify areas where students need additional support and guidance and then providing the necessary assistance. The learner is "taught" by technology, which makes them capable of learning (or know-how), but that information is then lost —though it can be recovered and enabled again at any time (Mattar, 2018).

From the theoretical framework in Fig. 1, the Zone of Proximal Development (ZPD) is shown to facilitate learning. The learner's independent actions are represented in the inner circle, while the outer circle illustrates what the learner can learn from peers. Interaction with knowledgeable others, along with the use of technology and resources, can enhance the learner's abilities and expand their knowledge beyond what they can achieve on their own. The theory of constructivism suggests that students' academic performance can be improved by engaging with knowledgeable individuals, such as teachers, parents, or peers, as well as using technology and tools like CIDOS 3.5, which is an online platform that provides various teaching materials to enhance learning for Communicative English students. By accessing the resources on CIDOS 3.5 and working with knowledgeable individuals, students can better understand the subject matter.



Fig. 1. Vygotsky's zone of proximal development (ZPD) adapted from Steve Wheeler (2015)

2.3 Motivational Theory

Intrinsic motivation is the desire to participate in a particular activity just for the pleasure of learning (Ryan & Deci, 2000a). In other words, a person is motivated by their inherent enjoyment or interest in the task rather than any external reward or pressure. For example, someone might find studying using CIDOS enjoyable, challenging, or fulfilling. At the same time, Self-determination theory is a theory that is related to intrinsic motivation. Intrinsic motivation is situational and shifts over time (Schunk, 2014). In other words, learners are more likely to be motivated when they feel that they have some control over their learning, feel confident in their abilities, and feel connected to others.

In this paper, social motivation refers to social situations and collaborations that may encourage students to participate in the Communicative English course. According to Ryan & Deci (2000b), social support and social contexts can significantly positively or negatively affect motivation. Wentzel (1999) claimed that socio-

motivational processes are vital in motivating people to pursue specific social goals. Students' academic results may be influenced by social motivation in addition to intellectual drive (Wentzel, 1999). Nasaruddin (2021) discovered that one of the features of CIDOS 3.5 that inspired learners to play a part was a pleasurable social experience in addition to obtaining subject matter knowledge and skills in his research on CIDOS 3.5. As a result, the social elements of the CIDOS 3.5 learning experience, such as the discussion board, forum, and participants' usage of social networking, may play a significant role in students' motivation. Social motivation in the CIDOS 3.5 setting includes students' feelings of connectedness to their classmates. This connectedness is consistent with research on "social presence" in online collaborative learning scenarios (Norliana et al., 2020; Zhonggen & Xiaozhi, 2019; Mohd Fahmi, 2018).

In online contexts, Hartnett (2011) found that self-regulation (recognizing the value of activity) is just as important as intrinsic motivation. His study was supported by Musa et al., (2021); Hakimi et al., (2017) that self-directed learning can increase students' motivation in learning. Learners are more motivated when they believe they can succeed at a task and value the outcomes of that task. As a result, it is vital to provide students with meaningful assignments and to lay the groundwork for open communication between educators and students. Cebi & Güyer (2020) discovered a link between students' motivation and the degree of their involvement with course material, whereas their choice of materials did not affect motivation.

Overall, motivational theories in learning provide insights into the factors that influence learners' behavior and performance. By understanding these theories, educators can create learning environments that are more engaging and motivating for their students.

2.4 CIDOS 3.5 is Beneficial for Learning Communicative English During Covid-19

The importance of facilitating conditions regarding lecturers and students engaging in online learning cannot be overstated, especially during the Covid-19 Pandemic. According to studies conducted by Al-Rahmi et al., (2021) and Adam et al., (2021), facilitating conditions are crucial in facilitating the use of CIDOS 3.5 among lecturers and students. Their research showed that the utilization of CIDOS 3.5 in Politeknik Mukah, Sarawak was significantly positive due to facilitating conditions. Therefore, CIDOS 3.5 provides various benefits for polytechnic lecturers and students in teaching and learning, particularly during the Covid-19 Pandemic.

By choosing to use CIDOS 3.5, institutions can enjoy several benefits, such as access to a broader range of teaching methods, reduced costs, and the ability to notify lecturers and students in emergencies quickly. Additionally, CIDOS 3.5 enables users to work from anywhere and anytime, providing increased flexibility and convenience (Razlina, 2016). Online language learning platforms can be cost-effective, as they often offer free or low-cost courses, saving learners money compared to traditional language courses or private tutoring.

During the Pandemic, students can learn at their own pace regardless of unforeseen occurrences, especially when they are under quarantine and cannot follow up with the teaching and learning lesson (Nasaruddin, Anuar, Kadimin & Sabli, 2021). Besides, the user-friendly features also ease students in attaining their learning material and completing their assessments (Bangga, Nanson & Ruzaini, 2021). Hence, the platform allows learners to study at their own pace and at a time that suits them best, making it a flexible and convenient option for those with busy schedules.

Nadia (2020) suggests that students are interested in learning English in informal settings such as Facebook, Instagram, YouTube, and WhatsApp. These social media platforms allow students from around the world to connect and engage in discussions on various topics. CIDOS 3.5 includes features like a chat box, forum, and discussion board that allow students to interact with their peers and receive prompt instructor feedback. By using these tools, learners can communicate with each other through chat rooms, discussion forums, or video conferencing, which provides them with an opportunity to practice their language skills in a more natural and realistic environment.

3. Methodology

3.1 Research Design

The research methodology employed in this study involves the use of a quantitative approach to gather data through purposive sampling. Data was collected using a questionnaire that employed a 5-point Likert scale. The data collected were analyzed to understand the behavior and patterns of the participants, which can be used to inform policies and interventions and contribute to a better understanding of the world.

3.2 Research Samples

This research study used a purposive sampling method to select a specific subset of participants. Specifically, the study focused on 100 students in their fourth semester who were enrolled in the 'Communicative English 3' subject and had used CIDOS 3.5 as a learning tool for Communicative English during the Covid-19 Pandemic. These students were selected to participate in the research.

3.3 Research Instruments

The research study utilized a 5-point Likert scale questionnaire of 11 questions divided into two sections. The first section, Section A, gathered demographic information from the participants, such as age, gender, semester, department, e-learning experience, and availability of high-speed internet. The second section, Section B, focused on the construct of Facilitating Conditions, adapted from Sukendro et al., (2020), which was relevant to the study's context in a Malaysian higher

education institution, specifically Politeknik Mukah. The questions were chosen based on their relevance to all research participants, as Creswell (2012) recommended. Before distribution to respondents, the questionnaire underwent a rigorous validation process to ensure its accuracy and validity.

3.4 Pilot Study

To ensure the questionnaire's clarity, comprehensibility, and effectiveness, a pilot study was carried out prior to administering it to the target population. The pilot test involved the distribution of an online questionnaire (Google form) to 30 polytechnic students who were users of CIDOS 3.5. Out of the 30 questionnaires that were distributed, 24 were returned. Under Connelly's (2008) literature, the sample size for a pilot study should be 10% of the more extensive parent study's expected sample size. Since this study included 100 purposive samples, a pilot test of 20 students was appropriate. Hertzog (2008) noted that a pilot study with 20 to 40 participants is sufficient for instrument development. The pilot test helped identify potential issues and shortcomings with the questionnaire, allowing researchers to refine and improve the instrument before administering it to a larger sample.

3.5 Validity and Reliability

This study assessed the questionnaire items for both content and face validity. The term "reliability" in research refers to how consistent a measure is across time, similar samples, and different uses of the same instrument. Cronbach's alpha was used to assess the internal consistency of the questionnaire, and the Likert Scale score from the pilot test was employed for this analysis. The researchers used Alias' reliability classification to interpret the Cronbach Alpha values. Results indicate that the Cronbach Alpha values for this construct were more significant than 0.80, which is considered very strong.

4. Result and Discussion

The setting of this study was one of the polytechnics in Sarawak. Participants in the survey were 100 students who enrolled in Communicative English during the Covid-19 epidemic and used CIDOS 3.5 to study Communicative English 3.

The demographic profile of the 100 survey respondents is shown in Table 1. According to Table 1, 28 (28%) respondents were male, whereas 72 (72%) were female. In terms of age, 8 (8%) were 19 years old, 72 (72%) were 20 years old, 13 (13%) were 21 years old, 5 (5%) were 22 years old, and the last 2 (2%) were 23 years old. The Civil Engineering Department provided 30 (30%) of the 100 responses. Meanwhile, the Commerce Department was represented by 70 (70%) of the respondents.

Table 1. Respondents' gender, age, and department

Demographic Profile	Number of Respondents	Percentage (%)
Gender		
Male	28	28
Female	72	72
Age		
19	8	8
20	72	72
21	13	13
22	5	5
23	2	2
Department		
Civil Engineering Department	30	30
Commerce Department	70	70

Table 2 presents descriptive information on students' perception of CIDOS 3.5 based on System Characteristics. When evaluating the advantages of CIDOS 3.5 based on the concept of Facilitating Conditions during the Covid-19 epidemic, item B1–B6 has an overall mean of 4.27 0.73, suggesting a very high score.

According to the data collected, 87% (n=87) of respondents stated that during the Covid-19 epidemic, their instructors would assist them in addressing their doubts when utilizing CIDOS 3.5. Furthermore, 85% (n=85) of respondents agreed that they received assistance from their classmates when using CIDOS 3.5. The uploaded videos also assisted students in reliving their lectures, as 83% (n=83) of respondents agreed. During the Covid-19 epidemic, 81% (n=81) and 85% (n=85) of respondents agreed that the institution provided e-learning spaces and computers to aid e-learning, respectively. Finally, 82% (n=82) of respondents stated they have the resources needed to use CIDOS 3.5 for Communicative English learning throughout the epidemic.

Table 3. Level of mean interpretation

Mean Value	Level of Interpretation
1.01-1.80	Very Low
1.81-2.60	Low
2.61-3.20	Medium
3.21-4.20	High
4.21-5.00	Very High

Descriptive analyses are utilized to provide a concise and informative summary of data, highlighting any trends or patterns that may be present. This study used descriptive analyses to calculate the frequency, percentage, mean, and standard deviation. Moidunny's (2009) interpretation of the mean score was used to interpret the findings. The level of mean interpretation is displayed in Table 3.

CIDOS 3.5 provides Communicative English students with the facilities they need to perform their tasks in teaching and learning during the Covid-19

Pandemic. Thus, students will require help desks and online support while using CIDOS 3.5, especially when they face technical problems. Therefore, Adam et al., (2020) proposed that facilitating conditions were one of the factors affecting the adoption of CIDOS 3.5 in their institution. The term "facilitating conditions" refers to a user's ability to accomplish a task (Venkatesh & Bala, 2008).

Facilitating conditions in an e-learning system are obtained from organizational support (staff), which assists learners in overcoming difficulties, and system architecture (tools) provide knowledge on how to use the system (Sukendro et al., 2020). However, CIDOS 3.5 implementation is more complex than it appears. Without the direction and manual offered by the trainer and courses, there will be misunderstandings or misconceptions in the delivery and use of the system.

In this study, respondents found that using CIDOS 3.5 was beneficial in Communicative English learning, especially during the Covid-19 Pandemic. When they received support through online technical help and feedback from lecturers, classmates, and institutions during the Pandemic, they perceived learning through CIDOS 3.5 to be easy to use. The encouragement from their classmates and lecturers also pushed them to utilize CIDOS 3.5 during the institution's closure.

Findings revealed that accounting students at Politeknik Sultan Abdul Halim Mu'adzam Shah (POLIMAS) and Jitra Kedah accept the use of CIDOS but that the system requires assistance from lecturers to be effective (Razlina, 2016). Ali Azeez et al., (2020) proved that the Facilitating Conditions had both direct and indirect effects on the actual use of technology, considering the Behavioral Intention and Perceived Ease of Use of the technology.

Moreover, this was supported by Sukendro et al., (2020); during the Covid-19 pandemic, the availability of organizational support and technological resources in facilitating e-learning impacted Perceived Ease of Use. Other studies also reported that facilitating conditions were the main element that determined technology acceptance during the Pandemic (Adam et al., 2021; Lin et al., 2021; Norliana et al., 2020). Therefore, an organization that wants to promote adopting and using a particular technology should ensure that the necessary facilitating conditions are in place. This can involve providing adequate technical and organizational support, offering training and resources, and creating a user-friendly interface, among other things. By doing so, the organization can enhance the individual's perception of the system and increase their likelihood of using it effectively.

Table 2. Students' perception of facilitating conditions

Items	SD	D	N	A	SA	Mean	SD	Interpretation
When I need help using CIDOS 3.5 in learning Communicative English during Covid-19 Pandemic, my lecturers will help me to clarify my doubt.	0	0	13 (13%)	40 (40%)	47 (47%)	4.34	0.70	Very High
When I need help using CIDOS 3.5 in learning Communicative English during Covid-19 Pandemic, my classmates will help me to clarify my doubt.	0	0	15 (15%)	40 (40%)	45 (45%)	4.30	0.72	Very High
When I need help using CIDOS 3.5 in learning Communicative English during Covid-19 Pandemic, the uploaded videos will help me to revisit the lesson.	0	0	17 (17%)	42 (42%)	41 (41%)	4.24	0.73	Very High
Generally, I think the utilization of CIDOS 3.5 in learning Communicative English during the Covid-19 Pandemic would be supported by the institution by providing some room for e-learning.	0	0	19 (19%)	37 (37%)	44 (44%)	4.25	0.76	Very High
Generally, I think the utilization of CIDOS 3.5 in learning Communicative English during the Covid-19 Pandemic would be supported by the institution by providing computers for e-learning.	0	0	15 (15%)	43 (43%)	42 (42%)	4.27	0.71	Very High
I will have the resources necessary for using CIDOS 3.5 in learning Communicative English during Covid-19 Pandemic	0	0	18 (18%)	40 (40%)	42 (42%)	4.24	0.74	Very High
Overall						4.27	0.73	Very High

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

5. Conclusion

Online learning can offer benefits beyond improving students' enthusiasm, engagement, and knowledge retention during the Covid-19 outbreak. It can also improve their comprehension, cognitive activities, adequate levels, positive reinforcement, motivation, and quick feedback. CIDOS 3.5 has proven to be beneficial in polytechnics. It allows students to easily access learning materials and promotes flexible learning. They can learn on their own and what they can do with supervision or aid. This social interaction and connectedness in using this platform also contributes to students' motivation and involvement in the learning process. Education systems should increase motivation and collaboration among learners to promote online learning more successfully through online class activities. Facilitating conditions, such as ease of use, technical support, and access to necessary hardware and software, play a significant role in students' acceptance of online learning platforms. Institutions should provide adequate training and support for students to ensure they have the skills and confidence to use online learning platforms effectively. As online education continues to grow, educators and institutions should prioritize facilitating conditions to help students succeed. It is recommended that online learning platforms be designed to be user-friendly and that technical support be readily available to ensure a positive user experience.

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