# COMPETENCIES IN EFFECTIVE LEARNING UNDER COVID-19 PANDEMIC - A CASE STUDY FOR COLLEGE FRESHMEN AT BINH DUONG UNIVERSITY

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## **ABSTRACT:**

The COVID-19 pandemic has profoundly affected every aspect of society, especially the education industry worldwide. Responding to the pandemic, Vietnamese universities have applied online classes via applications such as Google Meet, Microsoft Teams, Zoom. However, to improve the efficiency in the learning process, each student, especially college freshman, needs to equip themselves with the study skills under the impact of the COVID-19 pandemic. The authors surveyed the opinions of freshmen from Binh Duong University on online classes and learning competencies under the pandemic. Based on the results, the authors list the main difficulties in online learning of college freshmen and assess the importance of learning skills: Self-study skills, Choosing a study location and environment, Taking notes, Time Management and Teamwork. The article also presents some helpful learning methods and suggests their application to improve the efficiency of online learning.

**Keywords:** *COVID-19* pandemic, Self-study skills, Learning capacity, Time management, Teamwork.

# 1. Problem

Since its outbreak at the end of December 2019, the COVID-19 pandemic has affected all activities of the society. Among them, education is the most affected sector. According to statistics of UNESCO, the education system of 188 countries all over the world has been disrupted. Many countries were forced to close schools nationwide and the pandemic has been affecting 91.3% of the total number of students worldwide (Anh, 2020).

Up to now, Vietnam has experienced 4 waves of pandemics, affecting most provinces and cities across the country. Areas such as politics, culture, and economy are all strongly affected. Like other countries, Vietnam's education sector is also under disruption because of the Covid-19 pandemic. From January to July 2020, the first outbreak of the epidemic in the country, schools were forced to close according to the directive of the Prime Minister. To adapt to the situation on the campus, schools have organized online teaching. Students to ensure quality and complete the program on schedule despite the difficult situation.

Freshmen enter the university lecture hall with many strange things, the transition from traditional to online learning has created many difficulties for them. From the problems they face, a group of college freshmen from Binh Duong University has studied the difficulties of freshmen learning online classes. Then, they have researched, discussed, and suggested a few skills and methods to improve the quality of online learning.

#### 2. Research Methods

To collect information for the research, the team conducted a hybrid (online and face-to-face) survey with Binh Duong University college freshmen. The survey's content focuses on the difficulties that students encounter, the skills they need in the learning process, the skills that need to be improved. Then, the authors suggest methods to help improve the effectiveness of online learning shortly. The research team sent the survey link to the students in the university and the direct survey and 120 students took part in the survey.

#### 3. Result

# 3.1. Difficulties in the online learning process

According to the survey's results (chart 1), it can be seen that most of the students'

difficulties are the influence of the Internet connection (58%). It can be said that having a stable transmission line is one of the necessary conditions to help students acquire knowledge most effectively. Besides, the problem of not keeping up with the lecture progress (45%), lack of learning equipment in practical classes (computer) (38%) along with the influence of ambient noise in the classroom making students have poor academic performance (30%). When there is too much noise around to blend into the sound of the lecture, of course, the lecture sound quality will decrease, even worse. In addition, the mental factor of depression (20%). Moreover, 5% of the students think that the interaction factor between the lecturer and the learners has decreased sharply when learning online, the atmosphere in the classroom will become quieter and the ability to impart knowledge and effective communication will be more effective. Knowledge acquisition will decrease accordingly.

#### Difficulties during online learning process



*Chart 1.* Some difficulties that students encountered during the online learning process. Source: Survey results (February 2022).

# 3.2. Skills to be equipped in the learning process

## 3.2.1. Self-study skills

Self-study is one of the most important skills in learning, especially for students. If people have a good self-study spirit, they can study well in any situation. At the university level, our students should equip themselves with good self-study skills, so learning productivity will be higher every day. Especially in the ongoing COVID-19 pandemic, the spirit of self-study will determine how your learning results will be.

Self-study is a form of cognitive activity of individuals to master the system of knowledge and skills conducted by students themselves in classes, outside of classes with or without prescribed curriculum and textbooks. Self-study is a basic form of learning in university with high independence and personal nuances (Moi, 2000). Learning and self-study skills are the processes of selfimprovement of knowledge not only from books but also from experiences in life.

One of the crucial skills that help students learn effectively in university is the course's material reading and preparing before classes. This is known as a compulsory task for every student. However, not everyone knows how to read scientific documents correctly. Especially, when the class schedule is full, the time to documents read will be limited. Referencing documents and practical experience will give some suggestions to help us read the document quickly and easily:

• Break the problem down into parts to deal with;

• Capture the surroundings and main ideas;

• Read carefully and take notes for the parts we need, skimming the parts we don't need;

• Actively read and learn to interact with the material or book you read;

• Make an outline to note the relevant pages of the book;

• Visualize what we read;

• Use directly or review to remember longer;

## 3.2.2. Time management

Without proper learning skills, students, especially freshmen, are likely to fall into a state of crisis because of lots of exercises/tasks but not enough time to prepare. Students sometimes don't know how to manage time in the most reasonable way. For example, most of them often wait until close to the time of the exam to review, taking notes for all the missing knowledge. This makes everything becomes rushed, causing pressure, stress, and fatigue. (Ky nang hoc tap hieu qua, 2021).

"Time management is selfmanagement", Dr. Le Tham Duong, lecturer of PR Business School. The meaning of time depends on how we use it. A student of Binh Duong University who participated in the survey shared that: "I don't know how to distribute my time properly, I don't have enough time to complete the assignments well. Thus, the learning results were not as expected". From there, we see the importance of time control in learning at university.



## Figure 1. Illustration of the Pareto Principle (Seamster, 2020)

LEAD

One of the most popular principles for time management is the Pareto Principle (also known as the 80/20 Rule), named after the economist Vilfredo Pareto (1848-1923). It states that a minority of causes, inputs, or efforts usually lead to a majority of the results, outputs, or rewards (Koch, 1998). For instance, 80% of the results come from 20% of productive time (figure 1). In learning, if we know how to prolong and well use this 20% time, your learning results will be improved more effectively. It is advised to take the time to identify the most important component and focus the energy there first. It is also recommended to avoid exhausting the time and energy on trivial pursuits but to look for key chains issues (Seamster, 2020). For students in higher education, the Pareto Principle helps them to learn more efficiently, especially in reading documents, books and revising the lessons. When working for the exams, the students are recommended not to reading through all the documents given by the lecturers but to find out what the documents are focusing on. They need to start to read the conclusion, then the introduction, the conclusion again, dip gradually into any interesting parts. "80% of the value of a book can be found in 20% or fewer

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of its pages and absorbed in 20% of the time most people would take to read it through", (Koch, 1998).

# 3.3. Changing study spaces and locations

Many people choose a fixed location for studying and think that it is the most suitable place to study. However, changing occasionally the study location gives a boost in the efficiency of learning. This helps learners to get rid of the boredom and refresh themselves. It is these changes that are a set of skills that help create new inspiration so you can learn better (Ky nang hoc tap hieu qua, 2021).



at home study at your friend's house changes often

#### **Figure 2.** Study location of freshman at Binh Duong University (Survey results in 2022)

According to the survey results, 54% of the students have their study location at home and do not change it during the online learning process. It is the reason for the result of 20% of the students in the survey (Chart 1) have shown that your difficulty is a depressed mental factor that causes your interest in learning to decrease inefficient acquisition of knowledge. Instead of studying in a single place in the house, we can try changing to studying near a window or where the morning sun shines. That will make students more interested in learning. In the Covid-19 pandemic, studying at home will be the safest option, but because of difficulties due to lack of learning equipment, unstable connections 4% of students have to study with their friends and share the study place. This is why students need to self-equip collaboration and teamwork skills.

## 3.4. Study and teamwork

Teamwork is working together to achieve a certain goal. Professor Leigh Thompson of the Kellog School of Management defines a group: "A team is a group of people who are interdependent concerning information, resources, knowledge, and skills. They seek to combine their efforts to achieve a common goal" (L.Thompson, 2008). Thus, a team is a group of people gathering together, interacting with each other, supporting each other, clearly assigning work, following a rule to achieve work goals.

We can list some principles that help to improve the efficiency in teamwork:

• Identify the main objectives: Before starting the projects, team members need to determine the common goals when working in the group. Each member is a separate individual. So if there is no consensus on the common goals, each person will follow his or her own opinion. Unified and committed to only one goal, the team will shape and develop team plans, outline the mission and goals to be achieved. Assigned work and responsibility for the work will help improve the effectiveness of teamwork.

• Enhance communication between members: Many teams are effective not only because they have good unity or skills, but also because the members have a connection with each other. When working in a group, members should actively communicate and exchange information with each other. The communication between team members is a two-way process, which helps members understand each other better and at the same time discover new problems that arise so that they can discuss solutions quickly. Members should communicate openly and honestly with each other, should ask questions to clarify more opinions, avoid starting conversations to find ways to refute or criticize colleagues. Creating a teamwork environment where members can freely express thoughts and opinions so that everyone can understand the group's ongoing activities and contribute more to the common work to promote efficiency.

• <u>Mutual trust and respect when</u> working in groups: In teamwork, trust is an important factor to promote close relationships between members. An effective teamwork environment means that all members can freely share information, ideas, or secret skills that only they have. Respecting and listening also helps members quickly bond and trust each other, minimizing conflicts and ensuring smooth group activities.

• <u>Avoid negativity in group activities:</u> When working in a group, it is advised to avoid previous personal opposition and negative emotions. Members should actively communicate with each other about their personal opinions. It is suggested not to blame or use harsh criticism against an individual.

• <u>Effective assignment of work and</u> <u>clear responsibilities:</u> Assigning tasks is always the most problematic part of teamwork. Each group is made up of many individuals, the lack of clear assignment of tasks makes individuals not clear on what they need to do. Besides, assigning tasks according to the ability and responsibility of each person is also a skill that the team leader must be extremely sensitive to. Each individual has their own strengths. The team leader needs to promote that strength in the group's work in order to take advantage of human resources and work effectively in the team.

## 3.5. Taking notes

In order to take notes more effectively, students can apply "The Cornell" method, which was developed at Cornell University almost fifty years ago. It has been embraced by countless colleges, universities in the USA and throughout the world (Pauk & J.Q.Owens, 2011). Taking notes helps students understand the lessons better, focus on the main ideas of the courses and also remember them for a long time. The research team has applied "The Cornell" method and found out its advantages in reducing the time used for taking notes, retaining well the main content of the courses.

## 4. Learning Methods

When the Covid-19 Pandemic is at risk of resurgence, online learning is the most optimal method today to ensure the safety and quality of students' learning. Therefore, identifying effective learning methods is essential. Based on a practical survey of the skills required of students in the process of online learning, the article proposes the following methods:

# With the traditional note-taking method, students take notes on what is said and written in the course. It can be written by hand or typed on a computer, but this is a highly passive method because students only need to see, hear and record the entire content, sometimes just copy it. To help students get out of the state of passive listening and taking notes, the authors

have researched and proposed a method

called The Cornell. When the Covid-19 pandemic is at risk of resurgence,

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The Cornell Method is a system for taking, organizing and reviewing notes. Professor Walter Pauk of Cornell University proposed this method in the 1950s. To create Cornell Notes, students can start by dividing the page into two columns. At the top of the page, the learners enter the name of the course, meeting, or workshop, along with the date and topic. With this method, we use one column to record the content of the lecture or meeting, the other column will record your opinion or questions you do not understand. This method will help develop our thinking capacity. The layout of this method is illustrated in

## 4.1. "The Cornell method"

3.

	Mar. 14 (Fri.) – Ed. 103 – Prof. Pauk Organizational patterns	
How do org. patterns help make books, lectures easier to follow?	Where is this going? Org. patterns provide guidance in lectures & texts. Tell you where author, speaker is headed. Learning common patterns can make it easier to follow both. Aleo, signposts (next, finally, thus) can provide clues about path.	
What are movement patterns?	Movement patterns systematically travel through time, space, process. Can be easiest pattern to follow. Several types:	
Examples?	<ul> <li>time or chronological pattern - events presented in order.</li> </ul>	
	<ul> <li>place or spatial pattern - info presented based on location or arrangement. Ex descrip. of geog. features of U.S., outline of company setup</li> </ul>	
	<ul> <li>process pattern - steps or events lead to desired situation or product. Ex: recipe.</li> </ul>	



# 4.2. Application of Notion

Notion – a single website that students need for work management. This is really a very useful application in managing personal things or in studying and working (figure 4). Some of the features of the Notion are:

• Nice user interface, multiple ways to display the layout

• Personal task management features: keep a daily diary by writing or speaking every night before going to bed. Take a moment to recall what we did today and what we do the following days. Record the things that we need to keep, set our goals, track the progress towards them and also manage our spending properly.

• In academic work, students will easily manage their time and allocate time appropriately

• Students can also use the Active Recall method with the Toggle List feature. With each piece of knowledge that we gain, we can memorize it as a question. As what is presented in the Cornell method, this activity leads the

learners to the direction of active learning by thinking and answering the questions we make during the learning process (A project management system for your design team that connects all your work, 2022).

← → / Design / ● Tasks		Share ✓ Updates Fav	UNICE .
-			
Tasks			
Everything the design team is working	on in one place.		
🖲 By Status ~	Properties Group by Status	Filter Sort 9. Search 💀 New 😽	
Not Started 3 ····	+ Next Up 6 ····	+ In Progress 4 ····	Ŧ
S Brand Colors	💪 Illustrated Portraits	Guidelines for Visuals	
Sam Baldwin	Camilie Ricketts	Cory Etzkorn	
High A	High A	High A	
📴 Help Center Redesign	🍐 Mobile Dropdown	🐓 Signup Menu	
David Tibbitts	Nate Martins	6 Andrea Lim	
Medium	High A	Medium	
III Standardize Typography	😺 Illustrated Facebook Ads	J GIF Instagram Ads	
Andrea Lim	Nate Martins	Nate Martins	
Low	Medium	Medium	

Figure 4. Project management using Notion (A project management system for your design team that connects all your work, 2022)

### 5. Discussing research results

The consequences of the Covid-19 pandemic have been seriously affecting the economy and society in countries around the world in general and in Vietnam in particular. In order to cope with the difficulties caused by the covid pandemic, Vietnam has taken many measures to ensure education quality. At Binh Duong University, during the Covid-19 pandemic, in order to ensure the health of the students while maintaining the studying plan, the school has direct switched from learning to online classes using Microsoft Teams.

By doing a quantitative study of 120 freshmen at Binh Duong University, the results showed that the change of study form caused students certain difficulties. Therefore, freshman

students need to be equipped with knowledge and skills to improve their competencies in effectively learning under the Covid-19 pandemic. Firstly, students need to improve self-study ability, choose appropriate study space and location, take notes of scientific lecture content, manage time and strengthen teamwork. Besides, the university should also organize more extracurricular sessions on how to practice self-study skills and optimal time management. Secondly, students need to learn and apply "The Cornell" method and use applications like Notion to have a reasonable study plan and work management. Third, the school needs to have programs and policies to support students with difficult circumstances, such as

students who don't have access to the internet connection. Fourth, teachers need to pay more attention to helping students improve their skills in information technology and effectively use applications for learning activities. In the scope of this research topic, the authors only focus on setting out the necessary skills along with effective learning methods, describing and pointing out the difficulties and barriers of freshman students at Binh Duong University. Further studies in the future can inherit the survey results and develop new research directions. Further analytics on the skills and effective learning methods can be done to propose practical solutions in order to improve the quality of online teaching for higher education.

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# TÓM TẮT:

Đại dịch Covid-19 đã ảnh hưởng sâu sắc đến mọi mặt của xã hội, đặc biệt là ngành giáo dục trên toàn thế giới. Để đối phó với đại dịch, các trường đại học Việt Nam đã áp dụng các lớp học trực tuyến thông qua các ứng dụng như Google Meet, Microsoft Teams và Zoom. Tuy nhiên, để nâng cao hiệu quả trong quá trình học tập, mỗi sinh viên, đặc biệt là sinh viên năm nhất đại học cần trang bị cho mình những kỹ năng học tập dưới tác động của đại dịch COVID-19. Các tác giả đã khảo sát ý kiến của sinh viên năm nhất Trường Đại học Bình Dương về các lớp học trực tuyến và năng lực học tập dưới đại dịch. Dựa trên kết quả, nhóm tác giả liệt kê những khó khăn chính trong việc học trực tuyến của sinh viên năm nhất đại học và đánh giá tầm quan trọng của các kỹ năng học tập: Kỹ năng tự học, chọn địa điểm và môi trường học, ghi chép, quản lý thời gian và làm việc theo nhóm. Bài báo cũng trình bày một số phương pháp học hữu ích và gọi ý ứng dụng của chúng để nâng cao hiệu quả học trực tuyến.

**Keywords:** đại dịch COVID-19, kỹ năng tự học, năng lực học tập, quản lý thời gian, làm việc nhóm..

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