

# **Investigating the integration of cloud computing in Students' English Learning Experience in Pandemic era; An Interpretative Phenomenological Study At secondary high school in Jeneponto**

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## **ABSTRACT**

This study investigated sixth students' lived experiences in English learning through the integration of cloud computing in the pandemic era. This study aimed to develop a better understanding of the nature of learning English in the pandemic era where sixth students from three different secondary high school models in Jeneponto regency participated in this study. This study employed qualitative research by implementing an interpretative phenomenological study as a design to interpret lived experiences of the students. The findings of this study showed four important aspects representing students' lived experiences in learning English by integrating cloud computing in the pandemic era. It interpreted that the integration of cloud computing in learning English mostly applying google apps, social media, and video conferences, then the construction values by integrating cloud computing in learning English in pandemic era found that it gave plenty of benefit in learning English furthermore the obstruction values by integrating cloud computing in learning English in the pandemic era found that it created some challenges for students. In addition, the meaning of learning English experience by integrating cloud computing in the pandemic era taught plenty of meaning in the lived experience of the students.

**Keywords:** integrating Cloud computing, Lived Experience in learning English, pandemic era

## **1. Introduction**

The impact of pandemic covid 19 has affected the important sector in life such as the economy, society, cultural politics as well as education. According to Honigsbaum, "The word "Pandemic is originating from the Greek pan meaning all and demos the people, and the

word is commonly taken to refer to a widespread epidemic of contagious disease throughout the whole of a country or one or more continents at the same time" (Honigsbaum, n.d.) The spread of the COVID-19 Virus has not been controlled by the

government raising concerns from various parties. This concern resulted in a decision that all activities would be carried out at home, including the teaching and learning process.

COVID-19 has caused various impacts in the field of education and global health problems. The whole world seems overwhelmed by the speed of the spread and the devastating impact of COVID-19. The coronavirus pandemic has a big effect because of its rapid spread; therefore, people have to adapt to the situation where it was required to 'stay at home, observe self-isolation, and work and study from home. The Ministry of Education and Culture (MOEC) based on official information, ready with all scenarios including the application of working together to encourage online learning (in networks) for students. To keep students studying at home ((Abidah et al., 2020). This condition places teachers and students in a new situation. In line with this pandemic, human civilization has developed rapidly, especially in the technology sector. The advanced technological developments provide alternative solutions for the teaching and learning process where students can to learn at home with the integration cloud computing technology as part of information communication technology.

According to Hamilton-Ekeke & Mbachu ICT' stands for "information and communication technology that include a diverse set of technology and technological tools used to communicate, disseminates, store and manage information"(J-T & E., 2015). ICT has been adopted in schools and colleges in place of 'IT' to signify the part played by a wide range of technology, not only merely to process information and communication but also for education, Therefore, it can be said that teaching and learning process at this time is relating with ICT in almost all scientific subjects such as English in EFL class (Tri & Nguyen, 2014)" Information and communication technologies (ICTs) has given contributions In education field to English language education for the past few decades"

ICT has become an essential part of classroom teaching and learning. ICT gives a chance to teachers as well as students to increase the quality of education in every subject in the teaching and learning process.

(Claire Kramsch, 2002). ICT has become an essential tool for educational change and reform providing learners with unprecedented opportunities to practice English and involve themselves in authentic environments of language use. The development of ICT has presented a cloud computing services a very prominent ICT to integrate in learning English especially in this pandemic era. the integration of cloud computing where the learning process utilizes the facilities of Cloud computing in the process of preparation, application and evaluation "Cloud computing is an emerging Internet-based computing paradigm, with its built-in elasticity and scalability, for delivering on-demand information communication technology (ICT) services to users in a pay-per-use basis"(Alabbadi, 2011). Referring to the definition of Cloud Computing it can be mentioned the term of Cloud as an internet an refers to computer. "Cloud computing is the delivery of computing services including servers, storage, databases, networking, software, analytics, and intelligence over the Internet ("the cloud") to offer faster innovation, flexible resources, and economies of scale" (*Microsoft Azure*, n.d.)

Cloud Computing has the advantage of running programs without installing the applications. And the integration of cloud computing makes it easier for users to access data and information via the internet for storage media. In cloud computing the instructions are executed and continued to the application server. After instructions are received by the application server, the data will be processed and ultimately the user will receive an updated page following the commands that have been given previously. Examples of Cloud Computing are Yahoo, PDF Gmail, and Google apps etc. The commands given in using the application will be directly integrated with the Cloud Computing system on the computer. Users only need an internet network to be able to run the application without the need for installation. The usage of Cloud computing in education becomes a solution due to many applications and large storage, but users must be able to run software interfaces from cloud computing, such as web browsers and e-mail. It can be a solution to solving ICT problems automatically with a responsive cloud network.

On the other hand, the pandemic disaster that hit the world of education has forced the school to think of various ways to deal with this problem, therefore the school has provided an alternative way by integrating cloud computing in learning activities. Varieties of platforms derived from cloud computing technology have been adapted for learning English such as Google Platform, Moodle, zoology, Edmodo, media conference, social media, Video conference etc. Students tend to learn English by integrating cloud computing to improve their abilities in English. Regarding this matter, most students utilize cloud computing technology in both formal school activities or autodidact activities to learn English during pandemics. The integration of Cloud computing technology has given a lived experience for students in their routine in pandemic era.

### Cloud computing

The usage of cloud computing in the 21<sup>st</sup> century is everywhere. Generally speaking, the integration of cloud computing is almost in every sector of society. According to Borko Furht and Armando Escalante (2010), Cloud computing can be defined as a new style of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet. Cloud computing has provided plenty of resources in the digital area which is widely used in the modern era. Furthermore the National Institute of Standards and Technology (NIST) (cited in Ruparelia, (2016) stated that cloud computing is “Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services)”

In addition based on Velte & Elsenpeter, (2010), Cloud computing refers to the construction of the internet that allows access by everyone including the facilities such as the web and applications that reside at a location other than your computer or other Internet-connected devices. By using an internet connection everyone can access cloud computing. Cloud computing set up an integration with a service provider, institute or company, hardware, software, and maintenance.

Students' experience in learning English in the pandemic era becomes an interesting matter to understand. In the pandemic era, students endured their lived experience in learning English at home where is this situation never occurred in the students lived experience in the past. This situation pushed students to learn English to be more independent. However, the more independent situation of the students is not supported by the power infrastructure and the culture of the area. And yet Learning English is a difficult task for the student who lives in a rural area. Therefore, the researcher who is originally a native of Jeneponto's regency in south Sulawesi intends to explore and investigate the lived experience of students in learning English by integrating cloud computing in the pandemic era.

## 2. Literature review

### Cloud computing Components

Cloud computing has a topological sense. This topological sense is constructed from several components that integrated each other to complete good cloud computing including clients, the data center, and distributed servers. The elements that integrated each other make up the three parts of a cloud computing solution.

**clients** as the tool that is connected with the cloud system consist of computer hardware and/or computer software that relies on cloud computing for application delivery (Höfer & Howanitz, 2009) including mobile clients, thin clients, and thick clients.

**The data center** is the physical server storing and organizing the data. A data center's design is based on a network of computing and storage resources that enable the delivery of shared applications and data.

**The distributed Servers** as physical facilities distributing or housing in a different location. servers are in geographically disparate locations.

### Cloud Computing services

According to Muniswamaiah, Agerwala, and Tappert (2019) Cloud computing delivers computing services including servers, storage, databases, networking, and software, over the internet for faster innovation, flexible resources, heavy computation, parallel data processing and economies of scale following figures refers to cloud computing services model

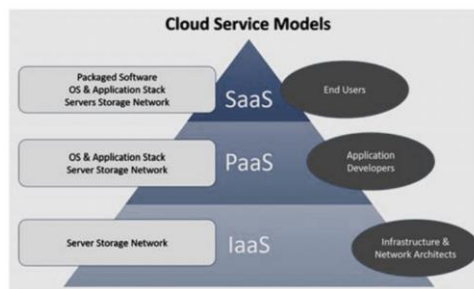


Figure 2.1 Cloud Service Models ( El-Daydamony, 2019)

### SaaS: Software as a Service

According to knorr cited in (Sun et al., (2007) Software as a service is a software delivery model, providing an access to customers. It represents the largest cloud market and it was the most commonly used business option in cloud services. SaaS delivers applications to the users over the internet. Applications delivered through SaaS are maintained by third-party vendors and interfaces. It was accessed by the client through the browser. Since most SaaS applications run directly from a browser, it eliminates the need for the client to download or install any software. In SaaS vendor manages applications, runtime, data, middleware, OS, virtualization, servers, storage, and networking which makes it easy for enterprises to streamline their maintenance and support.

### PaaS: Platform as a Service

NIST (2011 as cited in Ferrer et al., 2016) defines a Platform as a Service model as The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. PaaS makes the development, testing, and deployment of applications quick, simple, and cost-effective. This model allows businesses to design and create applications that are

integrated into PaaS software components while the enterprise operations or thirty-party providers manage OS, virtualization, server, storage, networking and the PaaS software itself. These applications are scalable and highly available since they have cloud characteristics.

### IaaS: Infrastructure as a Service

Manvi & Krishna Shyam, (2014) stated that Infrastructure as a Service refers to a combination of hosting, hardware provisioning, and basic services needed to run a cloud computing model that provides a self-servicing platform for accessing, monitoring, and managing remote data center infrastructures such as compute, storage and networking services to organizations through virtualization technology. IaaS users are responsible for managing applications, data, runtime, middleware, and OS while providers still manage virtualization, servers, hard drives, storage, and networking.

### Cloud computing's Providers

There are many providers in cloud computing such as. Amazon web services, Microsoft Azure, Google Cloud Platform, Oracle Cloud, Alibaba Cloud

### a. The use of Cloud Computing in The Pandemic Era

#### Google apps

Based on Edwards & Baker, 2010 cited in Andrew, 2019) showed the investigation of google apps in learning contexts suggested Google apps were easy to use. Some Google apps were used in learning. such as google classroom. Google doc, google presentation, google meet, etc. the use of google apps displayed some advantages in learning

#### Social Media

in terms of mixed formal and informal learning in social media, the obvious high frequencies of materials acquisitions by using YouTube or Wikis, and unofficially with Facebook or WhatsApp) Li, (2017). Social media is used not only to entertain and communicate but also has provided plenty of sources for learning. Social media has given

facility to learn. The facility that is provided by the provider showed how technology in ICT based on the cloud has changed the activity of learning

### **Video conference**

According to Becta 2003 cited in Nonthamand, (2020) Video conference is a technology that allows learners to see and communicate with others from different locations. The ideas appeared to bring multimedia by using a video as an important aspect of learning. Video is a digital media widely used among instructors in the self-learning system (Mitrovic et al., 2017)

### **Learning English**

English is the most widely used language in the world. The use of English for learning has been spread all around the world. By learning English plenty of benefits will be obtained due to the use of English as the international language. According to David Crystal (1997) cited in Parupalli Srinivas Rao, (2019) invents a phrase, "English as a global language". The status of English as a global language was influenced by the fact that English was used as lingua franca where people communicate at the international level by using English therefore, proficiency in English is needed to enable one to understand the basic skills needed in the modern life; for example, proficiency in computer and driving. With the technological advancement,

Many factors contribute to the market for learning English the factor refers to the legacy and domination of the old British Empire that took the language around the world and the political factor gives the current influence and dominance of the USA. And the last is science and technology have developed with English as the main language (Maxom, 2012:10). There is no hesitation to say that English has been used as the de facto language in the field of science and technology. Even most Hollywood movies and TV programs are made in English and a majority of the newspapers in the world are published in English. It is also the language of scientific research and the common language used in the tourism department. Therefore, learning English is essential in the present day

### **Students experience**

The concept of experience is a central one in Dewey's overall position in the philosophy of education. According to Dewey (cited in Berding, 1997) definition of experience: 'Our experience is simply what we do. Experience is related to the activity that is experienced consciously in general terms. Students experience the interaction

### **Research question**

1. What are the experiences of students by integrating cloud computing in Learning English in the pandemic era?
2. How do the students interpret the experience of integrating cloud computing in Learning English in the pandemic era?

## **3. RESEARCH METHOD**

A research design is a set of a framework that guides the researcher in analyzing the variables specified in the research problem. In general, the current study employed qualitative research. Creswell & Poth (2012) mentioned several designs underlie the research such as narrative, grounded theory, phenomenological, ethnography, discourse analysis, and case study. Therefore, the researcher classified the current study as a phenomenological study. The phenomenological study describes the common meaning for several individuals of

their lived experiences of a concept or a phenomenon. Moreover, this study applied an interpretative phenomenological study as a research design. According to Smith, Flowers and Larkin (2009) the interpretative phenomenological study is phenomenological in that it is concerned with exploring experience on its own terms furthermore. Smith, & Shinebourne, (2012) stated that the interpretative phenomenological study aims to explore in detail how participants are making sense of their personal and social world, and the main currency for an Interpretative phenomenological study is the meanings particular experiences, events, and states hold

for participants. This study aims to explore the integration of cloud computing in Students' English Learning Experience in the Pandemic era in Jeneponto Regency. The experience of the students in the pandemic era will be explored to know the meaning and the interpretation of their experience in English learning by integrating the cloud computing therefore, interpretative phenomenological was considered to explore the aim of the study

In this study, the participants were students from secondary high school in Jeneponto who learn English by integrating cloud computing in the pandemic era. Each participant was chosen from a different model of secondary high school in Jeneponto. The first participant is from SMA Negeri 2 JENEPONTO (Public High School 2 Jeneponto), The second participant was taken from SMK Negeri 8 JENEPONTO (Vocational High School 8 Jeneponto) and the third participant was taken from MA Negeri 1 Jeneponto (Boarding High School 1 Jeneponto)

In qualitative research, the researcher is the primary instrument to collect the data. According to Ary, (2010) "The primary instrument is an instrument collected by the researcher specifically as the primary instrument for data collection in qualitative research". The researcher used a primary instrument to analyze the experience of the students in integrating cloud computing in learning English in the Pandemic era by interview. In this research, the researcher used the interview to dig up the experience of students in learning English in the pandemic era by integrating cloud computing.

The interview was applied to analyze the meaning experience of the participants in learning English in the pandemic era by integrating cloud computing. In collecting data, the researcher interviewed the participants one by one. Total 9 questions were used regarding the students' lived experience in learning English by integrating cloud computing in the pandemic era. Each interview was conducted in Jeneponto after face-to-face learning was re-employed in the school.

The procedure of collecting data used some stages such as planning, observation, and

collecting the data. the first stage was planning. This stage aimed to collect some information related to this research. The next stage was observed. This stage was applied to conclude what type of data and participants were needed and the last stage was collecting the data from the experience of the participant.

In analyzing and verifying the data of the participants. Miles and Huberman's data analysis was employed which consisted of three procedures. Based on Miles et al., (2018), There are three procedures to analyze qualitative data they are; Data Reduction, Data Display, and Data drawing/conclusion.

Data reduction is a process of simplification and transformation of data from spoken form through editing, segmenting, and summarizing data. from spoken form through editing, segmenting, and summarizing data. Therefore, the researcher looked for the required data that refers to the research by sorting and selecting the relevant data or not relevant data to the research conducted. Then data display is a process of organizing, compressing, and assembling information. The function of data display (including types of matrices, graphs, charts, or networks) is to perform accessible, compact, and organize information.

The third step of qualitative is conclusion drawing and verification. From the start of data collection, the qualitative analysis is beginning to decide what things mean is noting regularities, patterns, explanations, possible configurations, causal flows, and propositions.

Triangulation

By using triangulation, the researcher determined the internal validity of qualitative research. Triangulation can be defined as the use of two or more methods of data collection in the study of some aspects of human behavior (Practice, n.d.) For this research, the researcher used methodological triangulation. Methodological triangulation is used either for the same method on different occasions or different methods on the same object of study. By looking for the definition the researcher used methodological triangulation as the researcher to apply several instruments to obtain the data

#### 4. RESULT AND DISCUSSION

### Cloud computing services in Learning English

cloud computing in learning English was fully applied in the pandemic era. According to the participant's experience, some cloud computing services have been used in learning English.

The finding shows that the participant mentioned some apps and websites to learn English in the pandemic era. The first

The first participant mentioned google cloud with its services was the dominant cloud-based to use in learning English. The second participant also stated that google cloud-based was the dominant however the participant also learns English through a website on the internet. While the third participant also stated google cloud services such as google classroom, google meet, google form, etc was the most used cloud computing services and the use of zoom application

Excerpt 1: “ At that time I was used WhatsApp, Google Classroom, Zoom, and YouTube (p1)

Excerpt 2: “ I was using google classroom WhatsApp, zoom (p2)

Excerpt 3: wait I remembered I used Google meet (p3)

Excerpt 4: Google meet and google classroom, YouTube

Excerpt 5: I was using zoom and google classroom

Excerpt 6: I had used some apps to learn English Such as google meet and google classroom

### The Constructive values of integrating cloud computing in learning English

Cloud computing has been adopted in learning English. The pandemic situation changed the way of teaching. All the schools in Jeneponto applied to learn from home by integrating cloud computing in the learning process. Based on students' experience Learning English in the pandemic era by integrating cloud computing provided its benefit

The finding shows that the first and the third participant showed enthusiasm that learning English by integrating cloud computing gave them the ability to access plenty of material on the internet easily. Furthermore, the second and the fifth participant said that by using cloud computing services, learning English

can be anywhere and anytime especially in a pandemic era there was physical distance. In addition, the fourth and sixth participants revealed that learning English by integrating cloud computing provided plenty of access to material and it has given a new experience.

*Excerpt 1; When I was learning English during the pandemic era I was quite interested in that. A lot of material in English was provided by cloud services and can be accessed through the internet.*

*Excerpt 2: I learned English everywhere and anywhere. It had given me much time with my family due to the physical distance policy so, I spent my time with my family almost every day*

*Excerpt 3: I got a new experience in learning English. I used to learn by using the book but during the pandemic, I accessed numerous materials provided by cloud computing services*

*Excerpt 4: learning English in the pandemic era in cloud computing services. I thought one of the advantages of it was. I was able to access materials that related to English*

*Excerpt 5: When I was learning using cloud computing in the pandemic era. I can learn English anywhere and everywhere. I love it*

*Excerpt 6: of course, learning English by using cloud computing services created a new experience in learning English*

### The obstructive values of integrating cloud computing in learning English

Learning English in the pandemic era demand the integration of cloud computing services due to the physical distancing. Physical distancing that was applied in the education field must be endured by students in their learning process. However human resources and infrastructure resources are still in the development process. This situation gave an impact on students learning activities. Based on the research of the study some information was found on the integration of cloud computing in learning English in the pandemic era.

The finding shows that three participants expressed that the poor connection is the main problem encountered in learning English by integrating cloud computing services. Moreover, two participants showed that distraction is the main issue for learning



English in the pandemic era by integrating cloud computing. And one student expressed that communicating causes miscommunication in learning English.

*Excerpt 1: Actually, I love to learn English, but when I learning English from home by using the internet sometimes, I did not get the information when my teacher explained the material, so I sometimes did not fully understand about that, that was lead me to miscommunicate about the assignment*

*Excerpt 2: My data, the connection in my village did not really optimal, so I had to search for a network to join with my friend in zoom to learn English*

*Excerpt 3: Not optimal, I remembered I had to ask my uncle to share his hotspot or network connection because my connection was not good*

*Excerpt 4: many distractions when I was learning English sometimes, I did not concentrate, actually I have a little brother. And then sometimes my mother called me.*

*Excerpt 5: I did not have a good connection. So, I remember when I was learning by using cloud computing or internet facilities was not really optimal especially when I was using the zoom application*

*Excerpt 6: yes, for me learning English in the pandemic era by spending my time at home and trying to access join google meet or zoom with my friend was troublesome. I did not focus because sometimes I got a distraction from my family even from the environment around me.*

### **The meaning of learning experience of integrating cloud computing in learning English**

The pandemic era gave a dynamic lived experience for students who learn English by integrating cloud computing. Students' experiences gave an interpretation and meaning toward how was the situation and condition of students when learning English. Integrating cloud computing in learning English demanded adaption in all aspects to be able to obtain knowledge in learning English.

The finding showed students interpreted their learning experience with some meaning toward their learning activity in the pandemic era. The first participant and the

sixth participant said that learning English in the pandemic era demanded eagerness and independence. Then the second mentions sincerity and then the third and fourth patient and responsibility are an important part of their learning experience. Then the fifth digital literacy

*Excerpt 1: Based on my experience. I believe learning English in the pandemic era by integrating cloud computing has taught toward the importance of willingness to learn, not only that this situation has taught me how to be an independent learner*

*Excerpt 2: First I think learning will be easy because I can learn anywhere and everywhere but I saw, I struggle to do that because sometimes I really enjoyed my time with my family. So, I believe we should put our sincerity to learn*

*Excerpt 3: we should be patient, my experience taught me. When we learned English in the pandemic era by integrating cloud computing we should be patient, because some problems can be occurred, for example, my connection at that time*

*Excerpt 4: for me, it was a matter of patience and responsibility, I should be known I was a student and a student have to learn to obtain a knowledge*

*Excerpt 5: my experience in learning English by integrating cloud computing has open eyes that I should improve my digital literacy, who knows what will happen in the future, the future is still a mystery*

*Excerpt 6: it taught me such an important matter of life. That' anything can happen in our lives who know we will learn at home for about two years, but for me from that moment I was able to understand that I should become an independent learner who has the willingness to learn English by integrating cloud computing services.*

### **Discussion**

Regarding the participant's experience with the phenomena of learning English by integrating cloud computing, all the participants showed this phenomenon had taught some important aspects of a live-in learning experience. Learning English in pandemic conditions by integrating cloud



computing gave the meaning of experience where is According to Dewey (cited in Berding, 1997) Experience is related to the activity that is experienced consciously in general terms. Some important aspects experienced by participants included the diverse use of cloud computing, the constructive values of learning English by integrating cloud computing, the obstructive values, and the meaning of the learning experience by integrating cloud computing in the pandemic era.

Regarding, the integration of cloud computing in learning English. The participants mentioned some cloud computing services that were used in learning English during the pandemic era. In line with (Tri & Nguyen, 2014) that Information and communication technologies (ICTs) have given contributions To the education field of English language education for the past few decades. Most of the students integrated public cloud services when learning English in the pandemic era. Including google apps (google mail, google classroom, google meet) social media (Facebook, WhatsApp, ) and zoom as a media conference. Ketut Sudarsana et al., (2019) The benefits of using google classroom in implementing education improve the teachers' and students' quality to use technology wisely, especially for the learning process, saving time, being environmentally friendly, overcoming the distance of residence, increasing collaboration among students, timeless communication, and as secure document storage.

The Constructive values of learning English by integrating cloud computing in the pandemic era. The participant emphasized how the pandemic situation gave plenty of benefits in learning English. In line with Zhang, (2021) the value of cloud computing was able to apply, modern network technology and education which was able to combine and establish a modern new English course. The integration of cloud computing in learning English changed how the students learn. According to the students' experience, the integration of cloud computing services provided them with a new experience in learning English. Furthermore, the students showed an interest in the learning process where learning English can be everywhere and

anywhere. Chiu, (2014) The prospering field of cloud computing provides a more open and diverse learning environment. In addition, the students express gratitude due to the time that was spent with their family of the students during the learning process in the pandemic era by integrating cloud computing services.

The obstructive values of learning English by integrating cloud computing in the pandemic era. The participant emphasized how the pandemic situation created some challenges for students. Muslimin & Harintama, (2020) most of the students said that internet connection was the main challenge. In line with students' experience in Jenepono, emphasizing that the internet connection was the main issue, however, the participant also expressed how the distraction of the family member at home affects the learning process in the pandemic era by integrating cloud computing.

Regarding the meaning of learning English experience by integrating cloud computing in the pandemic era. The participant emphasized the experience of learning English in the pandemic era by integrating cloud computing has taught plenty of meaning in the lives of the students'

eagerness and independence. In a pandemic, then the second mentions sincerity and then the third and fourth patient and responsibility are an important part of their learning experience. Then the fifth digital literacy in line with (Udeogalanya, 2022) Embracing digital literacy education and the relevant tools as the culture by all involved in the business of education may guarantee the provision of the skills to withstand most future random systemic shocks. Based on the meaning of students lived learning experiences. It evoked the awareness of the students that some important aspect is essential in learning English by integrating cloud computing in the pandemic era

## 5. CONCLUSION

The overall analysis interprets that the participant expresses some important experiences in learning English by integrating cloud computing in the pandemic era. Some important experiences of the participants have confirmed representing the situation and condition of the participants throughout the

pandemic era in learning English by integrating cloud computing. The experiences of the participants indicated how cloud computing services integrate into learning English. Then the experiences of the participants demonstrated constructive values and obstructive values in learning English by

integrating cloud computing in the pandemic era. Finally, the experience of the participants has taught an awareness that learning English in the pandemic era by integrating cloud computing created an essential meaning for the lived experiences of the participant

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