CAPTER II

REVIEW OF RELATED LITERATURE

2.1 The Previous Related Research Finding

In May 2014 Google has announced a new Google application, Google classroom for educational purposes. Google Classroom is considered to be one of the best platforms out there for teacher workflow improvement. Google Classrooms are available as tools to expand teaching and learning processes around the world. An applied study in Bangladesh tried to investigate the importance of e-learning for students.

Literature reviewed, it was found that Google classroom is needed in the teaching and learning process, especially when it involves computer lab learning activities such as making observations, asking questions, checking books and other sources of information to see what is already known, planning investigations, review what is already known, use tools (computer software) to analyze data and interpret data, propose answers, explanations, and predictions, and communicate results.

By using Google classroom, help teachers save time, organize class, and improve communication with learners. This application is also available on smartphone for anyone with Google Apps for Education, a productivity suites free tool including Gmail, drive and document[1]

Learning theory has been developed by several figures, such as Pavlov & Gantt, Skinner, Ausubel, Gagne, Bloom who discovered patterns of thinking in conditioning human learning. Nevertheless, human sensitivity does not always exist, therefore learning and learning concepts are born that try to integrate the intelligence

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[1]Latif S,"Learning Engagement in Virtual Environment," Int. J. Comput. Appl. 2016, vol. 148, no. 11, h. 7–13.

software product into its hardware intelligence component that developed after Heinich, Couse & Chen, Walter & Briggs, Seels & Rachey developed the concept of learning technology.[2]

The concept of educational technology is still focused on efforts to give birth to the procedures for solving these problems. The concept has been found that is innovation in learning models based on information technology. One of them is animation learning, learning games, computer-based learning tutorial.[3]

The use of online electronic media has been widely developed by researchers and has been widely tested, including the Moodle, Edmodo and Google classroom programs. Of course, various media have advantages and disadvantages. In this research, the media that we want to examine is the use of Google classroom, because Google classroom is a medium that is quite effective in learning. Existing programs allow anyone to use it. Google Classroom is a mixed learning model that is used for every scope of education which aims as a solution to the difficulties in creating, sharing and grouping assignments without having to collect paperless assignments. Google Classroom is designed to facilitate the interaction of lecturers or teachers with students or students in cyberspace. This application provides an opportunity for lecturers or teachers to explore the scientific ideas they have to students or students (Rozak & Albantani).[4] This software has been published to the world community as part of Google Apps for Education (GAFE) since August 12, 2014. This application

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[2] Seels, B. B., & Richey, R. C. *Instructional technology: The definition and domains of thefield*. IAP. (2012).

[3] Kurnia, N., Darmawan, D., & Maskur, M.Efektivitas Pemanfaatan Multimedia Pembelajaran Berbantuan Ispring Dalam Meningkatkan Motivasi Dan Hasil Belajar Pada Mata Pelajaran Bahasa Arab. Teknologi Pembelajaran, (2018, h.3(1).

[4] Rozak, A., & Albantani, A. M. Desain Perkuliahan Bahasa Arab Melalui Google Classroom. Arabiyat : Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban, (2018). 5(1), h. 83–102.

makes it easy for educators and students to carry out the learning process. In use, educators and students can collect, give, and assess assignments without being bound by time limits. Google Classroom is used to help educators create and collect assignments without having to type or use paper (paperless), including features that can make time effects such as the ability to automatically make copies of documents for each student.

Google Classroom itself is an application built by Google and offers a virtual system based on web applications where teachers can provide and manage tasks assigned to their students through a web browser or mobile app.[5] This research will use Google Classroom as a platform that supports learning inside and outside the classroom in selected groups of students.

The purpose of education at the moment is inseparable from the demands of technological development as competencies that should be possessed by both teachers and students. Internet technology for example, today has a lot of coloring every side of our education, both in terms of teaching, learning, teachers, students and parents.

The variety of conveniences and benefits offered by information technology is one of the considerations in the use of technology in teaching and learning. The use and utilization of technology has also become a lot of research objects in the context of educational development. The intended facilities such as obtaining and sharing information, discussing in groups, to interactions between teachers and students in a media that can be accessed anywhere and anytime with the help of computer and internet technology. For example, social media learning applications or

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[5] Etherington, D. Google Classroom now Lets anyone school anyone else | Tech Crunch. Retrieved November 20, 2019, from https://techcrunch.com/2017/04/27/google-classroom- now-lets-anyone-school-anyone-else/

learning management systems (LMS) which have been widely used today are able to present an alternative where teachers can obtain and various teaching materials, interact between teachers and students to provide online tests to their students.

Edmodo for example, as one of several social media applications dedicated to learning has many features that can be utilized by teachers and students both inside and outside the classroom through an internet connection. Various studies have also been conducted in order to find empirical evidence of the benefits and impacts of the use of social media applications in teaching and learning.

One example of research that has been done is to prove that using Edmodo on learning can help develop students 'Self-Directed Learning (SDL) abilities, which are simply self-directed learning that can be understood as students' ability to initiate identifying what students need in learn and or without the help of others and determine their own learning targets to be achieved. Furthermore, SDL is also one of the learning models needed to answer the challenges of educational goals today, which is an innovative learning model.[6]

Several studies and studies related to the use of social media applications in teaching and learning have been carried out by Dabbagh & Kitsantas with the title Personal Learning Environments, social media, and self-Direction learning: A natural formula for connecting formal and informal learning that aims to create the concept of the relationship between the Personal Learning Environment, Social Media and Independent Learning, and provides three levels of framework for the use of social media to create a Personal Learning Environment that supports student self-learning. This study concludes that teaching students to become effective

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[6] Khodary, M. M. Edmodo Use to Develop Saudi EFL Students' Self-Directed Learning. *English Language Teaching*, *10*(2), 123. 2017. https://doi.org/10.5539/elt.v10n2p123

independent learners can help them acquire basic and complex personal knowledge management skills that are essential for creating, managing, and maintaining a Personal Learning Environment by using a variety of available social media applications.[7]

Conclusion of research on the application of learning Google Classroom in learning English is certainly able to support further research as a basis for testing and obtaining empirical evidence in using other social media applications namely Google Classroom applications in learning English, its relation to learning ability Self-Directed students. And knowing where students are able to apply learning online C-based Google classroom during covid-19.

2.2 Some Pertinent Idea

2.2.1 The concept of Cognitive Learning

2.2.1.1 Definition of cognitive Learning

Cognitive comes from the English "Cognitive" which means understanding. Broadly interpreted that Cognition is the acquisition of knowledge, structuring and use. If the meaning in general is an intellectual ability that consists of several stages ranging from Knowledge, Comprehension, Application, Analysis, Synthesis, until evaluation. There are also those who interpret cognitive as the ability to develop rational (reason).

Learning for cognitive flow is seen not just as getting a stimulus and producing a mechanistic response, but learning also involves mental conditions in individual learners related to perception, attention, motivation and others. So learning is understood as an active mental process in obtaining, remembering and

[7]Dabbagh, N., & Kitsantas, A. Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education*, *15*.no1, 2012. 3–8. https://doi.org/10.1016/J.IHEDUC.2011.06.002

showing into behavior. Behavior that appears cannot be observed and measured if it does not involve mental processes such as awareness, motivation, beliefs and other mental processes.

Cognitive learning theory is a theory that explains thought processes and differences in mental conditions and the influence of internal and external factors in producing an individual's learning. If the cognitive process works normally, the acquisition of information and storage of knowledge will work well too. However, if the cognitive process does not work as it should, then there is a problem in learning.

2.2.1.2 Principles of Cognitive Learning Theory

Cognitive Learning Theory implies that different processes regarding learning can be explained by analyzing mental processes first. This suggests that with an effective cognitive process, learning becomes easier and new information can be stored in memory for a long time. On the other hand, ineffective cognitive processes lead to learning difficulties that can be seen anytime during one's lifetime.

In general, the Principles of Cognitive Learning theory if include the following;

1. Process is more important than results.

2. Also called a perceptual model.

3. Perception determines a person's behavior as well as understanding of a 11situation related to learning goals.

4. Changes in perception are learning processes that are sometimes not sound in the form of behavior.

5. A learning situation or subject matter which is broken down into small components or fragmented will eliminate meaning.

6. Learning is an internal process consisting of information acquisition, memory, information processing and other psychological aspects.

7. Learning is also a complex thinking activity.

8. In its application in learning this learning theory looks at the stages of development (J. Piaget), Advance Organizer (Ausubel), Understanding Concepts (Bruner), Hierarchy of Learning (Gagne), and Web teaching (Norman).

9. The involvement and activeness of students is very important in learning.

10. The subject matter and learning process are arranged with patterns ranging from simple to complex.

11. The diversity of individual students needs to be considered, because it is very influential on the success of their learning.

2.2.1.3 The People of Cognitive Learning Theory

Some Cognitive learning theory figures whose theories are widely applied in education include:

1. Max Wertheimer, Kurt Koffka, Wolfgang Kohler

The three of them are the pioneers of the Gestalt theory. They argue that the whole is more meaningful than parts for human cognition. So the good learning process starts from the whole (Gestalt) and then analyzes the elements or parts thereof.

2. Kurt Levin

This theory was put forward by Kurt Lewin (1892-1947). According to him, each individual is in a force field that is psychological in nature. The field in which individuals react is called life space. Life space includes the embodiment of the environment in which individuals react, for example; the people he meets, the

material objects he faces, and the mental functions he has. So according to Lewin, learning takes place as a result of changes in cognitive structures. This change in cognitive structure results from two kinds of strength:

    a. Cognitive field structures

    b. Individual internal motivation needs[8].

3. Jean Piaget

Piaget is a developmental psychologist with a comprehensive theory of the development of intelligence or thought processes. Because individual learning abilities are influenced by the stage of personal development and changes in individual age. According to Piaget, the growth of mental capacity provides new mental faculties that were not there before. Intellectual growth is not quantitative but qualitative. Children's intellectual growth contains three aspects, namely structure, content, and function. Children who are experiencing development, structure, and intellectual content change develop. Functions and adaptations will be structured to give birth to a series of developments, each of which has a special psychological structure that determines the child's mental abilities. So, Piaget defines intelligence as several psychological structures that exist at a special level of development.[9]

4. David Ausubel

The essence of Ausubel's learning theory is meaningful learning. Meaningful learning is a process that is associated with new information on relevant concepts contained in a person's cognitive structure. The learning process is not merely memorizing concepts or facts, but is an activity that connects concepts to produce a

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[8] Khodijah, Nyayu, *Psikologi Pendidikan*. Jakarta : Raja Grafindo Persada. 2014
[9] Dalyono, M. *Psikologi Pendidikan.* Jakarta: PT. Rineka Cipta. 2012, h. 37-39

complete understanding so that the concepts learned will be well understood and not easily forgotten.

5. Jerome Bruner

Jerome Bruner argues that learning activities will work well and creatively if students can find certain rules or conclusions on their own. In this case, Bruner distinguishes into three stages, namely:

a. The information stage, which is the initial stage for acquiring new knowledge or experience,

b. The transformation stage, which is the stage of understanding, digesting, and analyzing new knowledge and transforming it into new forms that may be useful for other things, and

c. The evaluation stage is to find out whether the results of the transformation in the second stage are correct or not.[10]

6. Albert Bandura

Bandura produced a theory from a derivative of cognitive learning theory called "Social Learning". Starting from his opinion about social cognitive theory which is a cognitive factor, social and also behavior has an important role in learning. This means that cognitive factors act on students 'expectations for success while social factors include learners' observations and experiences of the behavior of people around their environment.

7. Robert Gagne

Based on cognitive learning theory, Gagne produced a learning model called "Learning Events". In the learning events model does not pay attention to whether

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[10] Syah, Muhibbin, *Psikologi Pendidikan dengan Pendekatan Baru*, Bandung: Remaja Rosda Karya 2009.

the learning process occurs through the process of discovery (Discovery) or the process of reception (reception) as introduced by Bruner and Ausubel, according to him the most important is the quality of determination (and save) and the usefulness of learning.

2.2.1.4 Application of Cognitive Learning Theory in Learning

In applying the Cognitive Learning Theory in particular there will be a learning model of Bruner, Ausubel, Gagne, and the Piaget intellectual development model. The general application of cognitive learning theory in learning is as follows:

1. Learning does not have to be teacher-centered but students must be more active. Therefore students must be guided so that they actively find something they learn. Consequently the material learned must attract students' learning interest and challenge it so that they are engrossed and involved in the learning process.

2. Learning materials and learning methods must be the main concern. Learners will find it difficult to understand the subject matter If the frequency of learning count jumps. For elementary school children the operation of a sum must use objects especially in the early grades because their developmental stage of thinking has only reached the stage of concrete operations.

3. In the learning process the teacher must pay attention to the stages of cognitive development of students. The material is designed according to the stages of cognitive development and must stimulate their thinking abilities.

4. Learning must be student-centered because students see things based on themselves. For the learning process to occur there must be no coercion so that the egocentric nature is not killed.

2.2.1.5 Cognitive Process in Learning

According to Gagne there are nine cognitive processes that occur in learning which are then called "learning phases". The learning phase is then classified into (1) the preparation phase for learning, (2) the acquisition and manufacturing phase, (3) the learning phase. Going to the phases of this learning phase must be carried out sequentially and each learning phase needs to be supported by a specific learning event so that at each learning phase it produces the maximum learning process activity within the student. This learning phase is very important because it is always present in every action of learning and is used differently in different types of learning. The following are the phases of learning:

1. Attention
2. Hope
3. Stimulate memory
4. Present stimulant material
5. Long-term memory storage
6. Showing ability / response
7. Give feedback
8. Assess ability
9. Increase retention and transfer.[11]

2.2.2 The concept of Blended learning

2.2.2.1 Definition of Blended Learning

According to Heinze and Poter quoted in Rusman, etymologically the term Bended Learning consists of two words namely Blended and Learning. The word

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[11] Woolfolk, Anita E. *Educational Psychology*. Fifth Edition. Singapura: Allyn and Bacon. Boston, Toronto, Sydney, Tokyo. (1993).

blend means "mixture, together to improve the quality so that it is better "(collons dictionary), or the formula of a combination of compounding (Oxford English Dictionary). While learning had common meaning of the study, thus s e shortcut implies learning patterns that contain elements of mixing between a pattern with other patterns.[12]

According to Rosenberg, quoted in Rusman, the terminology of blended learning refers to the use of internet technology to send a series of solutions that can enhance knowledge and skills.[13] Blended Learning is a combination of traditional learning characteristics and electronic learning environments or blended e-learning combining aspects of blende e-learning such as web - based learning, video streaming, synchronous audio communication , and ansynchronous with traditional "face - to - face" learning .

Blended learning is a learning model that combines face-to-face learning (face to-face) with e- learning. Blended learning is a new concept in learning where the delivery of material can be done in class and online (Bielawski and Metcalf) in Husamah. A good combination of face to face teaching where teachers and students meet face to face and through online media that can be accessed at any time. The combination of face-to-face learning with e-learning is due to the limited time and easy to make students feel bored quickly in the learning process and the demands of increasingly broad technological development.[14]

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[12] Rusman, ddk, Pembelajaran Berbasis Teknologi Informasi dan Komunikasi Megembangkan Profesionalitas Guru, (Jakarta: PT Rajagrafindo Persada,2015), h. 242

[13] Rusman, ddk, Ibid.,h.249

[14] Husamah. Pembelajaran Bauran (Blended Learning) Terampil Memadukan Keunggulan Pembelajaran Face-To-Face, *E-learning Offline-Online*, dan Mobile Learning. Jakarta: Prestasi Pustaka, (2014).

Blended learning is currently being talked about because of the boring learning process in class and the increasingly broad technological development so that many practitioners develop and give their opinions on the meaning of blended learning, like Semler. Husamah argues that the meaning of blended learning is to combine the advantages of e-learning, face-to-face excellence, and practice. Moebs and Weibelzahl in Husamah define blended learning as a combination of online and faceto-face learning activities.[15] To Graham in Sari mention the definition of blended learning that is often asked is learning that combines the learning media, learning that combine learning models and theories of learning, and learning that combine learning face to face (face-to-face) with online learning. Based on the explanations from Semler, Moebs and Weibelzahl, and Graham, the notion of blended learning is the merging of e-learning learning with face-to-face learning using learning media and learning theories in the learning process.[16]

1.2.2.2 Strengths of Blended Learning

Blended learning is developed because of the weaknesses that arise in face-to-face learning (face-to-face) and e-learning. Besides being developed because of the emergence of weaknesses of both learning, blended learning was developed because of the advantages of face-to-face learning and e-learning. The advantages of blended learning expressed by Kusairi in Husamah are:

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[15] Husamah. Pembelajaran Bauran (Blended Learning) Terampil Memadukan Keunggulan Pembelajaran Face-To-Face, *E-learning Offline-Online*, dan Mobile Learning. Jakarta: Prestasi Pustaka, (2014), h 11-12

[16] Sari, Milya. Blended Learning, Model Pembelajaran Abad Ke-21 Di Perguruan Tinggi.Ta'dib, Jurnal Fakultas Pendidikan dan Pelatihan Guru, Universitas Batusangkar,17 no.2,2016),h126.136.Darihttp://ecampus.iainbatusangkar.ac.id/ojs/index.php/takdib/article/view/267/264.

a. Students are free to learn the subject matter independently by utilizing the material available online.

b. Participants students can communicate / discuss with teachers or learners else that should not be done while in class (face to face).

c. Learners learning is done outside hours of face to face can be managed and controlled well by the teacher.

d. Teacher can add material enrichment through the internet facility.

e. The instructor can ask students to read the material or take a test conducted before learning.

f. Teachers can organize quizzes, provide feedback, and use test results effectively.

g. Participants can share their children file with other learners.[17]

Based on Kusairi's explanation above, it can be concluded that the advantages of blended learning, namely learning activities can be done in class or outside the classroom by utilizing technology to add subject matter and questions given in class or through online which are managed and controlled in such a way by the teacher so that learning activities can take place, and communication between students and between teachers and students can be established both when in class and outside the classroom (online) by forming a discussion group that utilizes technological developments in this era because learning without communication will not produce results in accordance with the good wishes of the teacher and students. Dewey and

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[17]Husamah. Pembelajaran Bauran (Blended Learning) Terampil Memadukan Keunggulan Pembelajaran Face-To-Face, *E-learning Offline-Online*, dan Mobile Learning. Jakarta: Prestasi Pustaka, (2014), h. 35

Moore (in Comey; in Sari) argue that communication is an important role in the learning process and is the key in creating an effective learning environment.[18]

2.2.3 The concept of Constructivism

2.2.3.1 Definition of Constructivism

Constructivism is a theory of how students build knowledge from experience, which is unique to each individual. Constructivism according to Piaget is a system of explanation of how students as individuals adapt and improve knowledge. Constructivism is a paradigm shift from behaviorism to cognitive theory. Behavior epistemology focuses on intelligence, the purpose domain, the level of knowledge, and reinforcement. While constructivist epistemology assumes that students build their own knowledge based on interactions with their environment.

Four epistemological assumptions are at the core of what we call "constructivist learning." The first is, physical knowledge is built by students involved in active learning. Second, knowledge is symbolically constructed by students who make representations of their own actions; Knowledge is built socially by students who convey their meaning to others; and the last is, Knowledge is theoretically constructed by students who are trying to explain things that are not fully.[19]

Constructivism learning theory is a theory that gives freedom to humans who want to learn or look for their needs with the ability to find their wants or needs with the help of others' facilitation, so this theory provides activeness for humans to learn

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[18]Sari, Milya. Blended Learning, Model Pembelajaran Abad Ke-21 Di Perguruan Tinggi.Ta'dib, Jurnal Fakultas Pendidikan dan Pelatihan Guru, Universitas Batusangkar,17 no.2,2016),h126136.Darihttp://ecampus.iainbatusangkar.ac.id/ojs/index.php/takdib/article/view/267/264.

[19]Singh. S & Yaduvanshi. S. International Journal of Scientific and Research Publications, Vol 5, no 3, March 2015 ISSN 22503153.

to find their own competencies, knowledge, or technology and other things needed to develop themselves.[20]

Related to the works of major authors such as Lev Vygotsky, John Dewey, and Jean Piaget, constructivism can be considered a major theory of learning, and in a broader sense education philosophy, is used as a general title to classify some other theories.[21] Constructivism is basically a theory based on observation and scientific study, of how people learn. In constructivism, prior knowledge plays an important role in building knowledge actively.

It is said that people build their own understanding and knowledge of the world, through things and reflect on those experiences. When we discover something new, we must reconcile it with our previous ideas and experiences, maybe change what we believe in, or maybe discard the new information as irrelevant. To do this, we must ask questions, explore, and assess what we know. In the classroom, constructivist views about learning can show a number of different teaching practices.

In the most general sense , it usually means encouraging students to use active techniques (experiments, solving real- world problems) to create more knowledge and then to reflect on and talk about what they do and how their understanding changes. The teacher makes sure he understands the student's previous conceptions, and guides activities to overcome them and then build them.[22]

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[20]Rangkuti, NA. Konstruktivisme Dan Pembelajaran Matematika. Jurnal Darul 'Ilmi Vol. 02, No. 02 Juli 2014.

[21]Mattar, Joao. Constructivism and Connectivism in education technology: Active, situated, authentic, experiential, and anchored learning. RIED. Revista Iberoamericana de Educación a Distancia, vol. 21, no. 2, 2018.

[22]Oliver, K.M. Methods for developing constructivism learning on the web," Educational Technology 40,no.6 ,2000).

Constructivism is rooted in philosophy, psychology, sociology, and education. But while it is important for educators to understand constructivism, equally important to understand the implications of the views of this learning to the development of the teaching profession and teacher .[23] The central idea is human learning so that students learn constructivism is built, building new knowledge on the basis of previous learning. Two important ideas surrounding the simple idea of knowledge that is built.

The first is that students build new understanding using what they already know. There is no tabula rasa where new knowledge is engraved. Instead, students come to learning situations with knowledge gained from previous experiences and that prior knowledge influences what is new or their modified knowledge will build from new learning experiences. The second idea is that learning is active rather than passive.

2.2.3.2 Characteristics of Constructivism's Perspective

Some characteristics that are basic principles of constructivism perspective in learning are:

a. Develop alternative strategies for obtaining and analyzing information.

b. It is possible to have multiple perspectives (multi perspectives) in the learning process.

c. The role of major students in the learning process, both in regulating or controlling their own thought processes and when interacting with their environment.

d. The use of scaffolding in learning.

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[23]Tam, M. Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Learning. Educational Technology and Society, 3 no2, 2000).

e. The role of students / teachers as tutors, facilitators and mentors to support success and fluency in the learning process.

f. The importance of learning activities and authentic learning evaluations.[24]

Bada & Olisegun, two characteristics seem to be central to the constructivist description of the learning process:

a. Problems Constructivist learning asks students to use their knowledge to solve meaningfully and complex problems realistically. Problems provide context for students to apply their knowledge and to take ownership of their learning. Good problems are needed to stimulate exploration and reflection needed for the construction of knowledge.

b. Collaborative the constructivist perspective supports student learning through interaction with others. Students work together as peers, applying their combined knowledge to solutions to problems. The dialogue that results from this combined effort gives students the opportunity to test and refine their understanding in the ongoing process.[25]

In constructivism theory, teachers and peers support and contribute to learning through the concept of scaffolding, tutoring, cooperative learning and learning communities. In constructivist classes, the teacher creates a situation where students will question their respective assumptions. So constructivist teachers need to create situations that challenge traditional teaching and learning assumptions. Constructivist teacher's perception of expertise in the classroom based on the

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[24]Udin. S. Winataputrah. *Teori Belajar dan Pembelajaran*. Tanggerang Selatan: Universitas Terbuka,cet.10;Ed.1.(2012.282.h. 6.19

[25]Bada & Olusegun, S. Constructivism Learning Theory: A Paradigm for Teaching and Learning. IOSR Journal of Research & Method in Education (IOSR-JRME) Vol 5, no. 6 Ver. I (Nov. - Dec. 2015), h. 66- 70.

experience of students - students in interacting with each other and with their teachers, and high ambiguity tolerance as evidenced in the trend of creating complexity .

2.2.3.3 A view of constructivism in learning and teaching

Constructivism postulates that knowledge cannot exist outside our minds; the fact is not absolute; and knowledge is not discovered but is built by individuals based on experience. The basic assumptions and principles - principles of constructivist view of learning: 1) Learning is a process that is active, 2) Learning is an activity that is adaptive, 3) Learning lies in the context in which it occurs, 4) All knowledge is personal and differences. This term tells that the information is constructed by students.[26]

The complexity and diversity of perspectives on constructivism introduces a set of general principles for this perspective. Hoover revealed two important ideas that included simple ideas about the knowledge that was built. The first idea is that students build new understanding using their current knowledge. In other words, students' initial knowledge influences their new knowledge. The second idea is that learning is not passive. Instead learn and active process in which the students negotiate their understanding in light of what they experienced in new learning situations.

If what students find is inconsistent with their current understanding, their current knowledge can change to accommodate new experiences. Thus students cannot be passive and they remain active throughout this process. Twomey Fosnot in Amineh & Dafatgari defines constructivism is based on four principles: (1) learn to

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[26]Josi, JS & Patankar, PS. *Use of Constructivist Pedagogy in Science Education*. Aayushi International Interdisciplinary Research Journal (AIIRJ).2016.

depend on what is already known to the individual, (2) new ideas occur when individuals adapt and transform ideas - the old idea of them, (3) study involves the discovery of ideas rather than mechanically gathering a series of facts, (4) meaningful learning takes place through rethinking old ideas and coming to new conclusions about new ideas that are contrary to our old ideas.[27]

2.2.4 The concept of Student Learning Center

2.2.4.1 Definition of the Student Center Learning

Learning innovations every time continue to experience improvement. It is hoped that efforts to improve the learning systems and methods that can touch various dimensions of human development have been carried out by various levels of education including the C package program. Currently the learning process is more directed towards student involvement in understanding the learning material received.

In this case the learning process is more centered on students / participants students or often called Student Centered-Learning (SCL). SCL is a learning strategy that puts students (subjects) active and independent, with psychological conditions as adult learners, fully responsible for learning, and able to learn beyond the classroom. Especially if we look at learning problems in the C package program, most of the face-to-face learning is done in a completely limited situation but the learning burden is almost the same as formal schooling. This limitation is indicated by the learning process only closer to being called mere formality. Therefore the application of SCL is expected to bridge the problems in the learning process.

2.2.4.2 The Student Center Learning Concept

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[27]Amineh. JR & Davatgari HA. Review of Constructivism and Social Constructivism. Journal of Social Sciences, Literature and Languages Vol. 1(1), h. 9-16, 30 April, 2015.

The SCL concept is a more appropriate method when applied in learning package C programs, including in learning geography. However, that does not mean the application of this method is not experiencing obstacles. The application of this method is considered to only center on the development of cognitive aspects. In addition, educators still face obstacles in implementing this SCL which is lack of understanding of the solution strategy.

2.2.4.3 Implementation of Student Learning Centers

The application or implementation of the SCL method is a process of applying ideas, policy concepts or innovations in a learning process that has an impact, whether in the form of changes in knowledge, skills and values and attitudes. This implementation is carried out along with the development of information and communication technology that can bring changes in the shifting role of the teacher as a messenger / information.

In the subject of geography, the teacher can no longer act as the only source of information in learning activities, but students can play a role and be directly involved in obtaining information from various sources, especially from the mass media, whether from electronic and print media broadcasts , personal computers, or even from the internet. The complexity of the scope of geography lessons in the education unit level curriculum allows learning material to change over time.

Therefore, the involvement of students in this C package program will bring about the sharing of knowledge (share of knowledge) between knowledge obtained by students from outside and written in textbooks. Meanwhile, the difficulty of the teacher to deliver material face to face can also be replaced through the method. On the other hand, teachers switch functions, from instructors to learning partners and as facilitators (from mentors in the center to guides on the side).

Material and instructional delivery model in SCL completely covers three aspects, namely (a) the content of science (Science and Technology), (b) mental attitude and ethics are developed and (c) the value - the value that is internalized to learners. These three aspects will be formed automatically if the learning process takes place with a mature plan. Students not only gain cognitive abilities, but also foster affective and psychomotor abilities. Geography material that is taught in the end does not only stick to when learning takes place but can affect the behavior of students.

Meanwhile, the pillars in SCL include:

1. Collaborative Learning Method (CL)

The SCL pillar with the Collaborative Learning (CL) method or group work is a method that is able to position the participants as part of social society through positive interactions between group friends. Peer in his group is the key to success in this method. Each member contributes information, experiences, ideas, attitudes, opinions, abilities and skills possessed, and together improve the understanding of all members. In this method each participant allows to have an equal understanding in a material.

CL method will succeed if: a) There is positive dependency between one member and another member (Positive interdependence), b) Have a sense of responsibility to each group member for the progress of the learning process of all members including himself (Individual accountability), c) Group CL conduct face-to-face interaction which includes discussion and elaboration of the discussion material (Face-to-face promote interaction), d) Each group member must have the ability to socialize with other members so that understanding of the material can be

obtained collectively (Social skills), e) Group must evaluate the learning process to improve group performance (Groups processing and Reflection).

The learning process that is centered on students through collaborative learning methods in learning geography in the C package program is expected to be a good condition as an effort to build whole learning. The method is more closely associated with other students. Therefore the limited frequency of learning and meeting between friends will contribute greatly to the development of students.

2. Problem-Based Learning (PBL) Method

Problem-Based Learning (PBL) is a learning method that uses problems as a first step in gathering and integrating new knowledge. Like CL (Collaborative Learning), this method also focuses on the activeness of students in learning activities. Students are no longer given learning material in one direction as in conventional learning methods. With this method, students are expected to develop their knowledge independently.

In the PBL method, students are given a problem. Then in groups (about 5-8 people), they will try to find solutions to these problems. To get a solution, they are expected to actively seek the information needed from various sources. Information can be obtained from reading material (literature), resource persons, and so forth.

2.2.5 The concept of e-Learning

2.2.5.1 Definition of e-Learning

e-Learning is a learning process carried out using the internet network, with e-learning can allow the delivery of information in the form of activities or applications such as websites using Information and Communication technology media in the form of internet or computer networks.

According to Jaya Kumar C. Newspapers quoted by Rusman, e-learning is learning that uses electronic circuits (LAN, WAN or Internet) to deliver learning content, interactions or guidance.[28] According to Smaldino who was quoted as Dewi Salma Prawiradilaga e-learning is a learning process that utilizes learning resources that are electronic, computer-assisted, but do not always have to be related to computers.[29]

In mental fundamentals, according to Prawiradilaga e-learning is an educational process that utilizes information and communication technology to mediate learning activities in a synchronous way, namely learning done by teachers and students not at the same time.[30]

Using e- learning in the form of an activity through the media can be done anytime, anywhere. E-learning has a superior characteristic that is not dependent on space (place) and time. On learning through this media does not take so long to proficient in it, or simply to be able to do electronic learning e-learning itself, and e-learning does not need a room (place) is large or widespread like learning in the classroom, e-learning that an internet media technology has shortened the distance.

2.2.5.2 Characteristics of e-Learning

In its implementation, there are several things that become the main characteristics of e-learning. The first characteristic, if we refer in terms of epistemology or language literally from e-learning itself, which means electronic or online learning, it can be said that this method utilizes electronic and digital technology services.

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[28]Rusman, ddk, *Pembelajaran Berbasis Teknologi Informasi dan Komunikasi: Mengembangkan Profesionalisme Guru*,(Jakarta: PT Raja GrafindoPersada, 2015), h. 288

[29] Dewi Salma P, *Mozaik Teknologi Pemdidikan*, (Jakarta: Kencana 2013), h.2.

[30] Dewi Salma P,*Ibid.,* h. 33-34

The next characteristic of e-learning is about the teaching material. Teaching material in e-learning is usually in the form of teaching material that is independent in digital form. Then, the material is stored in a computing system. That is, it can be accessed by teachers and trainees anywhere and anytime. Not only that, the characteristics of e-learning can take advantage of learning schedules, making curriculum and educational administration systems that can be accessed at any time through computer networks.

2.2.5.3 Benefits of e-Learning For Teachers and Students

The impact and benefits of e-learning can be felt by all parties. Even more so for large organizations and companies. Among them is making it easy for participants in getting optimal material. While for learning managers, the benefits of e- learning can monitor the development of participants easily and quickly.

1. Support the learning process

Trainees can easily access e-learning material, all of the material shared is digital. This will have a very positive impact on the participants. They can access material easily, anywhere and anytime and choose material that suits each individual's interests and needs.

2. More flexible study time

The trainees also often have difficulty in determining the right learning time. Especially if they have to sort out what material should be studied in the conventional way. With e-learning , participants can flexibly determine their study time. Because the e-learning method is equipped with various features that can be used. Then, e-learning also provides convenience in terms of access. Here both teachers and participants can interact intensely anywhere and anytime. Participants even easily repeat the learning material when they don't understand it well.

3. Can monitor performance

For teachers, the existence of e-learning can also be used in tracking or monitoring the progress of trainees. Especially in achieving the material provided. Here both the instructor and the manager of learning can find a solution along with a problem in the teaching and learning process. For example, when there are participants who are unsuccessful in one exam, here the instructor can offer a learning method that suits the participant's need.

In the e-learning are also provided reporting features and analysis on what the difficulties faced by the participants. From here the instructors will be able to evaluate what needs to be improved and applied to the participants regarding the right method.

4. Save learning costs

The last benefit that can be obtained when using is to save money. For institutions or companies, the benefits can be felt is that it can reduce training costs. Because everything is done online so as to minimize other additional costs needed like a conventional class. Examples include the cost of renting classrooms, accommodation and printing learning materials, because all material is available in digital form.[31]

2.2.6 The concept of Google Classroom

2.2.6.1 Definition of Google classroom

Google Classroom itself is an application built by Google and offers a virtual system based on web applications where teachers can provide and manage tasks

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[31]https://codemi.co.id/elearning-pengertian-karakteristik-manfaat/*di askes pada 24 September 2019 pukul 19.00 WIB*

given to their students through a web browser or mobile app[32] . This research will use Google Classroom as a platform that supports learning inside and outside the classroom in selected groups of students.

According to Abdul Baril Hakim Google Classroom is an internet-based service provided by Google as an e-learning system. This service is designed to help teachers create and share assignments with students paperless. The use of this service must have an account at Google, besides Classroom can only be used by schools that have Google apps for education. [33]

Thus Google Classroom is an application provided by Google for education to create classrooms in cyberspace. This application can help make it easier for teachers and students to carry out the learning process more deeply. Learning by using class design that applies GC is actually environmentally friendly because students no longer use paper in collecting their assignments.

Utilization of GC can be done through multiple platforms, through computers and mobile telephones. Teachers and students can visit the site https://Classroom.google.com or download the app via Play Store on android phone on iOS with key glass Google classroom. The use of the LMS is free of charge, so that its utilization can be carried out as needed.[34]

According to research conducted by Izenstark and Leahy, the design of Google Classroom is familiar to students because they have used several products

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[32]Etherington, D. Google Classroom now Lets anyone school anyone else | Tech Crunch. Retrieved November 20, 2019, from https://techcrunch.com/2017/04/27/google-classroom-now-lets-anyone-school-anyone-else/

[33]Abdul Baru' Hakim. *Efektifitas Penggunaan E- Learning Moodle Google Classroom Dan Edmodo, Jurnal I-Statement Vol.02 No 1, Tahun2016,h. 2*

[34]Vicky Dwi Wicaksono dan Putri Rachmadyanti, *Pembelajara Blended learning Melalui Google Classroom Di Sekolah Dasar*, Jurnal Seminar Nasional Pendidikan PGSD UMS& HDPGSDI Wilayah Jawa , Universitas Negeri Surabaya, h. 515

from Google via their Google Apps account. Students really like how connectivity is between Google Classroom and Google Drive accounts. They do not need to worry about storing documents in class computers because the automatic saving feature (auto save) and the use of Drive makes tasks easier to store and organize.[35]

Based on the results of research conducted by Nabiyev in Filippova's research, online learning has several advantages and disadvantages. The strengths are learning at their own pace, the availability of learning for everyone, getting feedback, work skills from the learning process, social equality, individual approaches and cheaper learning. But there are also some shortcomings of online learning such as the lack of direct communication (face to face) between students and teachers, the condition of individuals who are not considered in distance learning, direct access to the source of material being taught, lack of training conducted and require Internet access and supporting devices (computer or smartphone).[36]

2.2.6.2 Google Classroom Functions

Google Classroom is a product that is part of Google for education which is very special, because this one product has many facilities in it such as giving job announcements or collecting assignments and seeing who has submitted assignments.

Google Classroom is connected with all other Google for education services, so educators can take advantage of Google email, Google DRIVE, Google Calendar, Google docks, Google sheets, Google slides, and Google sites in the learning

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[35]Izenstark, Amanda, and Katie L. Leahy. "Google Classroom for Librarians: *Features and Opportunities.*" Library Hi Tech News 32 (9):1–3. https://doi.org/10.1108/LHTN-05-2015-0039.

[36]Filippoya, Tatyana. "Priority Fields of E-Learning Development in Russia." Procedia – SocialandBehavioralSciences206(November).ElsevierB.V.:34853.*hhtps://doi.org/10.1016/j.sbspro.2015.10.063*

process. So when educators use Google Classroom educators can also use Google Classroom to remind students about schedules or assignments that exist. While the use of Google drive as a place to store learning needs such as power points, files that need to be used in learning and others.

Thus Google Classroom can help facilitate teachers and students in carrying out learning activities in more depth. This is because both students and teachers can collect assignments, distribute assignments, and discuss lessons anywhere without being subject to time limits or class hours. This makes learning more interesting proises and efficient d a lam terms of management time, and no board early and more students forget about the task that has been assigned by the teacher.[37]

2.2.6.3 Steps to create a Google Classroom

1. Open www.classroom.google.com then click sign in to start opening classrooms in Google Classroom or can be done by opening a Gmail email then select the upper right tab.

2. Click Continue to begin creating the class using Google Classroom.

3. Next to start creating a digital class with a + sign on the tab, then write the class name then click create to start a new class.

4. Invite students who join the class by way of me revealing the class code.

2.2.6.4 Social Influence on the use of Google Classroom in learning English

Based on the understanding of the Business Dictionary, social influences are actions, reactions and thoughts that are influenced by other people and groups. Social influence (social influence) the degree to which the individual considers it important for the others to accept that he had to use the new system. Based on research

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[37]Diemas Bagas Panca Pradana dan Riana Harumutu, *Pengaruh Penenrapan Tools Google Classroom Pada Model Pembealajaran Project Based Learning Terhadap Hasil Belajar Siswa*, Jurnal IT-Edu Universitas Negeri Surabaya. Vol 02 No 01,2017, h. 60

conducted by Bawack and Kamdjoug, the social influence on the use of health information systems has a significant impact because the use of health information systems depends on patients and the government. Doctors choose to use the system if required and patients need the system.[38]

In this case, social influence relates to how the role of important people such as lecturers or the role of others such as teaching assistants or friends can influence student behavior so that students use Google Classroom. Therefore, the higher the social influence on the use of Google Classroom, the higher its influence in supporting Accounting learning.

2.2.6.5 Strengths and weaknesses of Google Classroom

1. The advantages of Google Classroom

According to Janzen M and Merry, quoted in shampa iftakhar, the advantages of Google Classroom include:

a. Easy to use: very easy to use design Google Classroom deliberately simplifying interactional interfaces and options used for task delivery and tracking: communication with the whole course or individual is also simplified through a notice announcement and email.

b. Save time Google classrooms are designed to save this time by integrating and automating the use of other Google applications, including documents, slides, and spreadsheets, the process of giving distribution of assessment documents, formative assessments and simplified and simplified feedback.

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[38]Bawack, Ransome Epie, and Jean Robert Kala Kamdjoug. "Adequacy of Utaut in Clinician Adoption of Health Information Systems in Developing Countries: The Case of Cameroon." International Journal of Medical Informatics 109 (October 2017). Elsevier:15–22. https://doi.org/10.1016/j.ijmedinf.2017.10.016.

c. Cloud based: Google Classroom brings more professional and authentic technology to be used in the learning environment because Google applications represent the majority of cloud-based enterprise communication tools used throughout the professional workforce.

d. Flexible; this application is easily accessible and can be used by instructors by students in a face-to-face learning environment and a fully online environment. This enables educators to explore and influence the learning methods that are reversed more easily and to automate and regulate the distribution and collection of tasks and communications in a number of instructional milieus.

e. Free: Google Cass itself can already be used by anyone to open a class as long as it has a Gmail account and is free. Besides that, you can access all other applications such as drives, documents, spreadsheets, slides and others. Enough to register a Google account.

f. Mobile home: Google Classroom is designed to be responsive, easy to use for mobile devices. Mobile access to interesting and easy to intract learning material is very important in today's web-connected learning environment.[39]

2. Lack of Google Classroom

a. Web-based Google Classroom requires students and teachers to connect to the internet.

b. Learning is individual so that it reduces students' social learning.

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[39]Shampa Iftakhar, "Google Classroom : What Work And How?" Journal of Education and social Sciences,Vol 3, Tahun 2016,h. 3

c. If students are not critical and material mistakes occur will have an impact on knowledge.

d. Requires high internet hardware and network specifications.[40]

2.2.6.6 Advantages and Disadvantages

There are advantages and disadvantages of Google classroom media are as follows:

1. Disadvantages of Google Classroom

a. Account management is difficult, because you are required to use a Gmail account Apps for Education.

b. Limited integration options with Google Calendar making it difficult to organize material and deadlines.

c. Beginners will find difficulty with symbols Google in it even Word files have to be converted to Google Doc first.

d. There is no automatic update of assignments, etc.

e. Learners find it difficult to share their assignments with other friends.

f. Learners can change the questions that have been given.

g. There are no quizzes or automated tests.

h. Live chat is not yet available.

2. The advantages of Google Classroom

a. Easy to use via computers, mobile phones or tablets.

b. Effective in communicating and distributing various materials

c. Or information.

d. Save time on assignment collection.

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[40]*https://www.google.co.id/amp/s/arkatkj.wordpress.com/2014/11/29/pengertian-keuntungan-dan-kelemahan-kelas-maya-virtual-class/amp/di askes pada 10 Desember 2017 pukul 19.46 WIB*
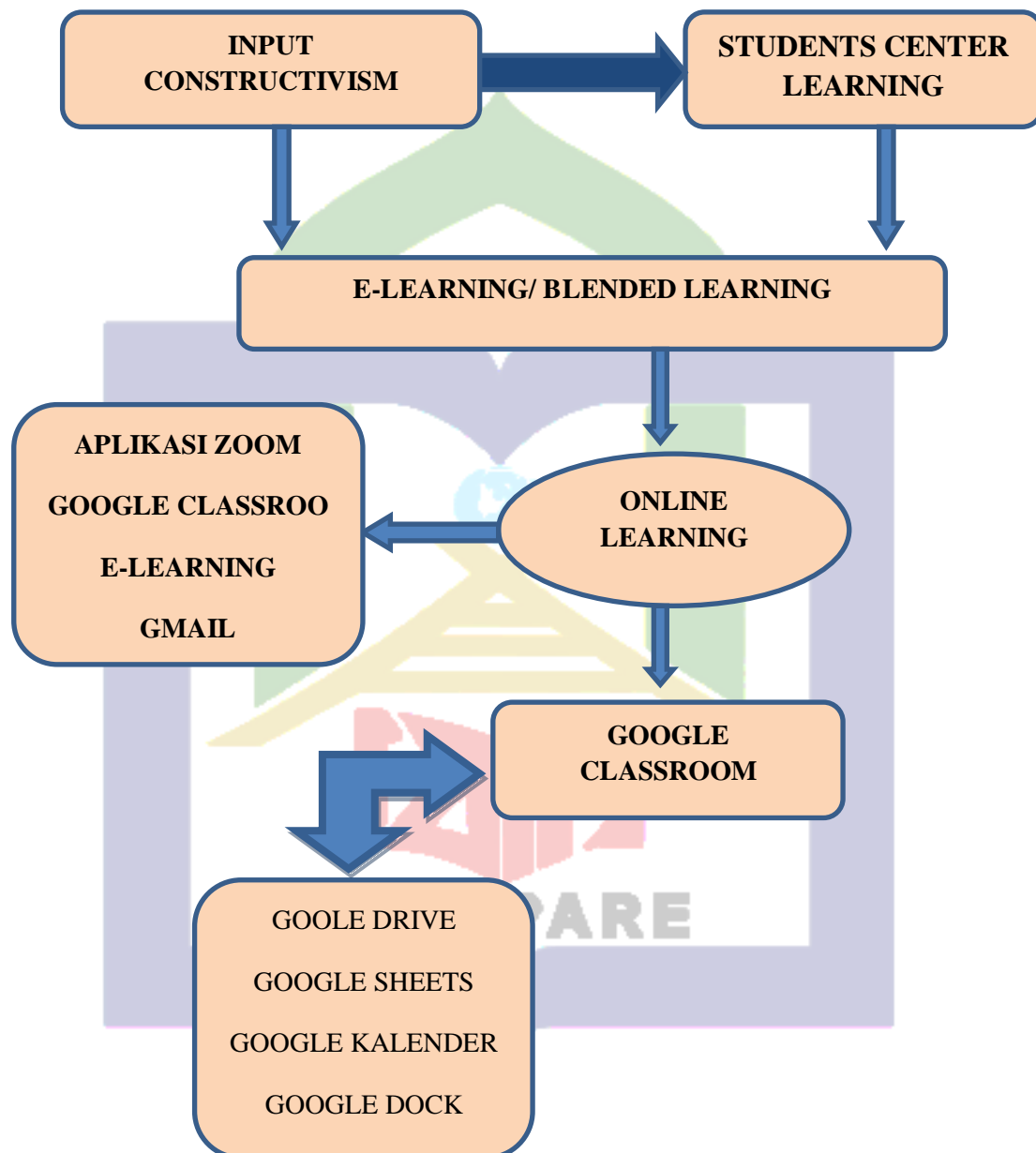
e. Improve cooperation and communication.

f. No paper required.

g. Friendly and safe.

h. Has an interesting comment system.

i. For everyone, teachers and learners.

2.3 Conceptual Framework

Based on the conceptual framework can be explained in Figure 2.1 as follow:

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┌──────────────────────┐            ┌──────────────────────┐
│       INPUT          │  ───────▶  │  STUDENTS CENTER     │
│   CONSTRUCTIVISM     │            │     LEARNING         │
└──────────────────────┘            └──────────────────────┘
            │                                   │
            ▼                                   ▼
        ┌────────────────────────────────────────────┐
        │      E-LEARNING/ BLENDED LEARNING          │
        └────────────────────────────────────────────┘
                                   │
                                   ▼
┌──────────────────────┐      ╭──────────────╮
│   APLIKASI ZOOM      │      │   ONLINE     │
│                      │ ◀─── │   LEARNING   │
│  GOOGLE CLASSROO     │      ╰──────────────╯
│                      │              │
│    E-LEARNING        │              ▼
│                      │      ┌──────────────────┐
│     GMAIL            │      │     GOOGLE       │
└──────────────────────┘      │   CLASSROOM      │
                              └──────────────────┘
                ┌────────────────────┐
                │   GOOLE DRIVE      │
                │                    │
                │   GOOGLE SHEETS    │
                │                    │
                │  GOOGLE KALENDER   │
                │                    │
                │   GOOGLE DOCK      │
                └────────────────────┘
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Picture 2.1

The main component above is describe as follow:

Input constructivism

Refers to the constructive theory in which students start learning by using online learning where students used applications such as zoom applications, Google classroom, Gmail, e-learning during the Covid-19 pandemic which make it easier for students to receive the material where and when determined by the teacher

Online learning

Referring to learning English by using various application such as the zoom application, Google Classroom, e-learning, Gmail and so on, by implementation of the application students can receive material provided by the teacher through application that have been used during the pandemic.

Google Classroom

Referring to the application of GC to students applied by the teacher, the researcher assumes that using GC applications in learning English can be done well or not. Researchers hope that by using the GC application can improve the learning process of English students.