PROCEEDINGS



Christian Education in Digital Technology Era: Challenges and Opportunities

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FAKULTAS ILMU PENDIDIKAN









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Welcome from the Rector of Universitas Pelita Harapan



Shalom and gratitude be to our Lord Jesus Christ! It is because of His love and mercy; we can gather together here in this event.

We are now in the end of the pandemic, where more than two years unprecedently we were forced to move to virtual education and embrace digital technology. Out of the millions of educators in Indonesia, both in primary, secondary, and higher education, quickly must learn and implement online teaching and learning. Every educator is required to adapt to various digital learning media, suddenly digital technology is not only a tool but the environment where we are living and interacting with one another. Not only do the schools have to provide the system to support virtual

learning, but educators also have to be equipped to design instructions that fit with the virtual setting. This need eventually triggers various parties to adapt, move, and innovate. Educators use a variety of media as a virtual meeting bridge with students. Not satisfied with just meeting virtual, educators also make some innovations by using other features and exploring any applications that will help provide creative materials and teaching materials.

However, despite of all the improvements and innovations in delivering teaching and learning in digital technology setting, there are many obstacles and challenges. The question remains, are students learning effectively? Especially for Christian educators, we need to keep asking the question, whether we have faithfully and effectively carried the mission of Christ-centered education, facilitating holistic transformational education in this digital technology era?

Christian education must consciously be aware of the current educational challenges while embracing the opportunities through the rapid development of digital technology. We should continuously ponder how to be faithful to our calling as Christian educators in this era of disruption. We should strive to be an exemplary institution in presenting Christian education during the fast-changed of digital technology. We believe that every technological progress is the fruit of cultural mandate to advance humans' life, fostering life given by God. On the other hand, Christians are also aware with our fallen nature, that there is a possibility of missing the point in any good effort that we are trying to do. Further as human beings, are we going to develop holistically if education is reduced by totally virtual learning? These are some questions that we need to keep thinking and discussing.

UPH, especially Teachers College, is grateful that we can host the first International Conference of Christian Education, especially inviting best panelist speakers to inspire us. We hope that through the ICCE event, there will be a forum for us, educators and practitioners of Christian education, to discuss the opportunity and challenges of doing our mission in the midst of such rapid technological advances. We also hope that this event will encourage us that amid various challenges that exist, God is faithful in sustaining us thus giving us hope to embrace the opportunities that are wide open to further our service to provide a quality, holistic, and transformational education.

Finally, enjoy the conference, Lord Jesus bless you.

Dr. (Hon.) Jonathan L. Parapak, M.Eng.Sc.

Welcome from the Dean of Faculty of Education, UPH



Today what is happening in the classroom is different from practices before the pandemic. Changes will continue to occur, especially with the advancement of digital technology, which will become increasingly sophisticated. The interaction of education with technology is inevitable. As Christian educators, we embrace digital technology development. We believe students as the Image of God, and the purpose of educating them is to see them flourish with creativity and innovation for the development of human civilization. However, every technological development that brings about good changes may unwittingly change something essential. For example, now we cannot escape

from digital technology. It is ubiquitous; from communication, working, shopping, and many more, all are on the digital platform. It has changed the way we interact with one another. To what extent has it changed us? How can Christian education embrace but also be aware of these?

That is the background of the International Conference on Christian Education with the theme, Christian Education in Digital Technology Era: Challenges and Opportunities. Christian educators must continue discussing this topic to carry out our mission faithfully. Continuously we need to learn and relearn to prepare our students well and be ready to embrace their future as disciples of Christ.

UPH Teachers College is very grateful for the cooperation with various parties, ACSI Indonesia and Australia, and Bandung Theological College, which made this first international conference possible. Likewise, we are blessed with the plenary speakers who are experts in their fields and will share their research and insights. We hope that all the presenters and participants will benefit most from this event. The committee has worked very hard to prepare for this event and we hope that by the end of the conference, the conversation will not stop. Let us continue strengthening Christian education in Indonesia through this forum, and we will meet again at the following conferences.

In the end, as our God has led all the preparation for this conference to take place, let His wisdom guide our conversation! All praise and glory be to God alone! God bless.

Oh Yen Nie, S.E., M.Ed.

Welcome from the Head of Bandung Theological Seminary



The ever-evolving world is a part of the Cultural Mandate or the Creation Mandate, which is revealed in Genesis 1:28. Therefore, we should respond to the development of digital technology critically and positively for Christian education in various contexts.

We are grateful for the first International Conference on Christian Education (ICCE) today, June 4, 2022, as the result of the collaboration between the Faculty of Education UPH, ACSI Indonesia, ACSI Australia, Indonesian Christian Education Council, and Bandung Theological Seminary (STTB), to study the

opportunities and the challenges of Christian education in digital era, by involving the experts from within and outside the country as the speakers.

Thank you, especially for the willingness of Mr. David Smith (from Calvin University, US), Mr. Darren Iselin (from ACSI Australia), and Mr. Agus Susanto (from ACSI Indonesia), as the speakers, and for all the committee from the Faculty of Education UPH who has been working hard to prepare this conference.

Hopefully, all the opportunities and the challenges in Christian education in the digital era that are studied through this conference will equip fellow educators with more comprehensive and sharper insights from the biblical point of view, so that the purpose of Christian education which is to produce Christian leaders who have a good spirituality, high competence, and strong dedication, can be more realized though this conference. Welcome to this conference. God bless you!

Sutrisna Harjanto, Ph.D.

Welcome from the ACSI Indonesia National Director



Dear ICCE presenters and participants.

The development of digital technology is rapidly changing the order of human life—which is also developing so swiftly as well. There are those who agree and follow the speed of development, accept it for granted, and even get involved in the development. Still, not a few are also indifferent to it, disagree and refuse to use digital technology for all kinds of reasons that are indeed or are made in accordance with their choice of decision. In addition, there are those who try to be neutral ("wise"), by looking at digital technology such as a double-

edged sword or fire which can be used either for good or evil purposes. e We have already seen practical examples of these two possible uses of digital technology everywhere.

What about us as Christians? Specifically Christian educators? The term of Christian educator, this can be viewed narrowly or broadly. In a narrow sense, some categorize Christian educators as those who work as teachers or lecturers. But we can also see it from a broad sense, that Christian educators are anyone who has the responsibility to educate, direct, and give vision to other people or the surrounding community. And this means that all Christians are actually educators, because Christians are followers of Christ, and Christ has assigned a role to us, Christians, as salt and light of the world. This means that we as Christians must be a flavor for the world and be a statement of God's truth to the world as well.

I represent Christian schools and Christian educators who are members of the ACSI Indonesia organization. I herewith also welcome all the speakers and participants of 2022 International Conference on Christian Education. This conference is organized by Universitas Pelita Harapan in collaboration with several Christian education organizations including ACSI. I hope that this conference can continue in the future and there will be more Christian educational organizations including churches, and synods, to be able to collaborate, like what is stated by ACSI's motto: Stronger Together, for us to be strong together, as one body of Christ. Let's salt the world more and bring light to the world. I hope that through this ICCE more and more people who work as Christian educators will grow and more Christians in general will be more aware of their calling and will realize that we are all educators, tasters, and proclaimers of God's truth, who need to be equipped and strengthened at all times. Especially through the theme of the 2022 ICCE: "Challenges and Opportunities for Christian Education in Digital Technology Era."

Finally, congratulations to UPH for initiating the first ICCE in 2022. Let us be those who wait on the Lord so that we may gain new strength, like an eagle that soars with the power of its wings, we run and do not become listless, we walk and do not grow weary (Isaiah 40:31).

Thank you, God bless us all.

Agus Susanto, Ph.D.

Welcome from the Chairman of the 1st ICCE UPH 2022 Committee



Shalom Aleichem, gratitude be to our Lord Jesus Christ, because of His love and favor, we can gather in this conference. It is such an honor for me to welcome you to the 1st International Conference on Christian Education (ICCE) UPH 2022, with the main topic, "Christian Education in Digital Technology Era: Challenges and Opportunities."

The rapid development of science and technology in today's digital technology era encourages the emergence of various educational innovations based on learning technology, making it

easier for educators and students to access multiple educational contents. This is marked by the ease of obtaining access to information and internet connection speeds. The Covid-19 pandemic has increasingly encouraged the emergence of various forms of digital learning media globally. This unavoidable pandemic requires school administrators', education providers, educators, and students to be able to adapt to changes in learning patterns from face-to-face learning to online learning. An education system that combines digital technology with the learning process will open opportunities and challenges as real implications of the transformation and paradigm shift of education in the digital technology era, including Christian education in it. Therefore, the 1st ICCE UPH 2022 aims to 1) Explain the implementation of digital technology development in learning and its implications and influence on the way we communicate and relate to others in Christian educational context an excellent, holistic, and transformational; 3) Enrich understanding to Christian educators regarding the calling response to teach in digital technology era by looking at the opportunities and challenges.

For organizing the 1st ICCE UPH 2022, allow me, as the chairman of the organizing committee, to express my deep gratitude and appreciation to the Keynoted Speakers, Mr. David I. Smith, Ph.D. (Professor from Calvin University, USA), Mr. Darren Iselin, Ph.D. (Director of Research and Innovation Christians School Australia), and Mr. Agus Susanto, Ph.D. (ACSI Indonesia Director) for each conference material presented. We also express our gratitude and most profound appreciation to the Advisory Boards and the organizing partner, Mr. Dr. (Hon). Jonathan L. Parapak, M.Eng.Sc. (UPH Rector), Mr. Sutrisna Harjanto, S.Si., M.Div., Ph.D. (Chairman of Bandung Theological Seminary), Mr. Agus Susanto, Ph.D. (Director of ACSI Indonesia), Mrs. Sandra Scott (Executive Officer of International Partnerships and Service Christian Schools Australia) and Mr. Marks Spencer (Director of Public Policy Christian Schools Australia). Likewise, we would like to express our gratitude and most profound appreciation to the Supervisory Board, Mrs. Oh Yen Nie, S.E., M.Ed. (Dean of the Faculty of Education, UPH) and Mrs. Sarinah Lo, Ph.D. (Senior lecturer of Bandung Theological Seminary) and to the Steering Committee Mr. Dr. Budi Wibawanta, S.Sos., M.Si. (Vice Dean of the Faculty of Education, UPH) and Prof. Dr. Niko Sudibjo, S.Psi., M.A. (Department Chair of Educational Technology, Faculty of Education, UPH). Expressions of gratitude and highest appreciation are conveyed to the entire organizing committee team, who have worked tirelessly to prepare for this conference so that it can be organized successfully. We also express our gratitude and appreciation to the presenters who have shared articles and published works in the form of proceedings and the participants who have involved in this conference.

Finally, we hope through the organizing of the 1st ICCE UPH 2022, as educators and leaders of Christian educational institutions, we can collaborate to do concrete works in the area where God has entrusted us in responding to the opportunities and challenges in the digital technology. We will appreciate constructive suggestions and criticisms to improve the quality of future conferences. To God be the Glory.

For we are his workmanship, created in Christ Jesus for good works, which God prepared beforehand, that we should walk in them. - Ephesians 2:10 (ESV)

Imanuel Adhitya Wulanata Chrismastianto, S.E., M.Pd.

The Application of Guided Inquiry Learning Model to Strive for the Activeness of High School Students in Online Learning

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Abstract

Student inactivity is one of the problems that occur in online learning, this is in accordance with the author's data reviewed based on indicators of student activeness. Students are the image of God that reflects an active God and as a social creature that requires communication, so that students' inactivity in online learning should be minimized. One of the teacher's efforts to strive student activeness is to apply a guided inquiry learning model. The purpose of writing this paper is to examine the problem of student activity when learning online using a guided inquiry learning model. The research method used is qualitatively descriptive. The conclusion of this paper is that guided inquiry learning models can strive student activeness because it provides plenty of space for students to argue, analyze, find information and infer knowledge. As for suggestions for teachers to be able to visualize instructions or have made announcements before learning so that learning time is more effective, and for researchers can further apply this model in a long time.

Keywords: Student Activeness, Guided Inquiry Model, Online Learning

1. Introduction

Online learning is an education system that is being implemented globally, but it is hoped that online learning will not reduce the success of achieving national education goals. In its application, affective development (student activity) is one of the obstacles observed during online learning. There are students that do not actively respond to questions posed by the teacher, do not actively ask questions, and do not actively participate in learning activities (Sareong & Supartini, 2020). Meanwhile, according to Viona & Suprijono (2014) in Zamratul, Nirwana, & Marjohan (2018) student activity is important because it can help teachers ensure all students achieve learning goals. The activity can also help students understand the material and remember the concept of the material (Setiyawan, Indrowati, & Nurmiyati, 2016). Therefore, the problem of student inactivity is a problem that must be addressed so that students can understand the material.

The results of observations and teaching at one of the schools in Tangerang were conducted online using the Microsoft Teams application, and it was showed that students were still less active when learning online. From 18 students in class X.1, only 3 students volunteered to respond to questions from the teacher, only 5 students responded to

teacher instructions in Microsoft Teams, 5 students were late for assignments, 7 students did not answer the teacher's questions in Padlet, and no one asked questions when the teacher gave the opportunity to ask questions. Therefore, the authors conclude that the problem is the lack of active students in terms of the opposite indicators of student activity. One of the learning models that can be applied to strive student activity is the guided inquiry learning model. The guided inquiry learning model is a model that places students as learning subjects and facilitates students to build their understanding (Haudi, 2021). The advantage of the guided inquiry learning model is that presenting problems in the form of questions can trigger students' curiosity (Natalia, Yusuf, & Ermadianti, 2013). So, it can be concluded that the guided inquiry learning model is a learning model in the form of a search that provides a forum for students to construct their understanding through guiding questions given by the teacher.

Based on the explanation of the problems and solutions that had been applied by the author, the formulation of the problem from this research is how the application of the guided inquiry learning model can strive students active during online learning? The purpose of writing this paper is to review a guided inquiry learning model can strive student activity during online learning. The research method used is descriptive qualitative which includes data from observation sheets, reflection journals, feedback sheets from mentors, lesson plans and literature reviews.

2. Literature review

STUDENT ACTIVITY IN LEARNING

Student activity in learning is a condition of students in carrying out various physical and spiritual activities, being involved in problem solving, daring to have an opinion to construct their understanding of material when learning in class or online learning (Nurhayati, 2020). The same meaning was conveyed by Sobron, Titik, & Meidawati (2020) that student activity in learning is the process and the ability of students to build their knowledge through the learning process. So it can be concluded that student activity is a series of student activities following all learning activities that are useful for developing student abilities and guiding students to reconstruct their knowledge.

Student activity can be caused by several things such as motivation from the teacher, clear instruction of explanations, reminding students' learning competencies, the existence of a problem stimulus to trigger student activity, the existence of varied learning models, feedback on student work, giving a short test at the end of the lesson and concluding the material (Martinis, 2007). The existence of student activity can support learning as a form of collaboration between teachers and students. Student activity is a motor learning activities (Sinar, 2018). Active students can practice critical thinking skills, can develop talents and can train themselves to solve problems that arise during the learning process (Wibowo, 2016). But what happens is the opposite is namely the non-achievement indicators of student activity (student inactivity).

According to Mardiyan (2012) in Dewi, A., Lunica, & Fitriani (2020), indicators of student activity include the desire of students to answer questions from the teacher, enthusiastic in learning, doing assignments instructed by the teacher and willing to display the results of working on assignments in front of the class. Meanwhile, according to Wibowo (2016) that student activity can be observed through students' readiness to take part in learning, students' courage, students' desire in problem solving, paying attention 268

(visual activities), and conducting discussions according to teacher instructions and listening to teachers during learning. Meanwhile, according to Nurhayati (2020) indicators of student activity include problem solving skills, ability to express opinions, focus and can work together. From these opinions, it can be concluded that the indicators of student activity in learning are (1) doing the tasks instructed by the teacher; (2) involved in problem solving (answering/responding to problems raised by the teacher); (3) trying to find various information needed for problem solving; (4) carry out the teacher's instructions in the form of group discussions in accordance with the teacher's instructions; (5) ask questions to the teacher/friends if they do not understand the material.

The five indicators are then used by the author to review student activity problems and review the increase in student activity after implementing a solution. Therefore, it can be concluded that students can be classified as active in learning if they meet the 5 indicators of student activity. If students' actions contradict the indicators of student activity, students can be classified as inactive during learning.

GUIDED INQUIRY LEARNING MODEL

The inquiry learning model is a student-oriented learning model so that students have many activities to develop their ideas in learning (Kusumawardani, Maridi, & Muzayyinah, 2016). One type of inquiry learning is guided inquiry, in its implementation guided inquiry acquires knowledge through the search process. The Inquiry comes from the word inquire which includes investigation, keep asking for information or investigation, that is why students are directed to always be mentally and physically active (Sani, 2019). The main target of the guided inquiry model is to maximize student involvement in learning, a series of direct and logical learning activities in accordance with the learning objectives and develop students' confidence in expressing the results that students get in the inquiry process (Setiawati, Fatmaryanti, & Ngazizah, 2013). Students do not only play a passive role by sitting and listening to the teacher's explanation, but students can be active, creative, think critically and increasingly motivated to learn and find answers from the stimulus provided by the teacher (Ariani, Hamid, & Leny, 2015). Therefore, the application of the guided inquiry model is important to build student activity and student orientation that can make student feel more about learning activities.

The steps for implementing the guided inquiry model according to Setiawati, Fatmaryanti, & Ngazizah (2013) namely the orientation stage, formulating problems, proposing hypotheses, collecting data and formulating conclusions. According to Firdausichuuriyah & Nasrudin (2017) the stages are collecting attention, presenting problems, making hypotheses, collecting data, formulating explanations and concluding. Krismayeni, Sudhita, & Dibia (2016) also stated that the stages were delivering the problem, limiting the problem, determining variables, proposing hypotheses, analyzing data, analyzing the guided inquiry process and determining the process. Based on this explanation, it can be concluded that the stages of the guided inquiry learning model are orientation, presenting problems, formulating hypotheses, collecting data, testing hypotheses, and making conclusions. The stages of implementing the guided inquiry model can be used by the teacher as an effort to seek student activity.

STUDENT ACTIVITIES WHEN APPLYING THE GUIDED INQUIRY LEARNING MODEL TO ONLINE LEARNING

The stages of applying the guided inquiry learning model during online learning do not require students to formulate problems, but the teacher presents simple questions that can lead students to get answers from information-seeking activities directly (Susanto, 2014). The stages of the guided inquiry learning model according to Sani (2021) are (1) the teacher starts by giving questions or asking problems, (2) students formulate temporary solutions to problems, (3) students collect data (4) students test hypotheses that have been made and (5) students make temporary conclusions based on concepts that they have been obtained. Before the inquiry process is carried out, the teacher gives a problem that leads students to a learning target through various complete procedures and detailed questions. After students search for information, the teacher can provide questions that further lead students to understand the concept of the material so that the application of this model makes it easier for students to understand the material and can be more focused on learning objectives.

The application of guided inquiry during online learning is mostly carried out by students but still collaborates with teachers, for example students provide hypotheses, search for data, and test hypotheses to conclude them. This is in line with the research conducted by Jundu, Tuwa, & Seliman (2020) that the advantages of the guided inquiry learning model are that it provides opportunities for students to solve problems that are contextual to student life. However, the author as a teacher still has a role to help and supervise students and give appreciation to students who have been active during learning (appendix 8). Hafshoh (2017) in the book Jamaluddin, Asfar, & Asfar (2020) explained that the role of teachers in learning the guided inquiry model is as a motivator so that students are motivated to be active, as facilitators who provide guidance on problems, as a questioner so that students are aware of their mistakes, as an administrator in charge of class activities, as a director who leads students to think, as a manager who organizes classes and as a rewarder who gives appreciation to students.

3. Research Method

This research method was carried out using descriptive qualitative methods. The research procedure is carried out in the first way, namely identifying the problem, the researchers make observations during the learning process and from the results of the observations data, the researchers obtain a problem that can be processed to produce a better learning system. The second is to design a solution, the form of the solution designed by the researchers is the application of a guided inquiry learning model. The supporting instruments are in the form of learning videos, lesson plans, learning media in the form of website padlets and question guides in the form of worksheets that guide students to understand the material and do assignments. The third is the application of the solution, the researcher applies the guided inquiry learning model solution for 3 meetings. Fourth is evaluation, the researchers evaluate student responses from the entire series that has been determined by the researchers and reflect on the weaknesses and strengths of the application of the model. The evaluation data is also supported by the teaching feedback provided by mentor.

The instruments used to obtain the data are observation sheets, discussions with mentor, giving assignments to students, literature review and documentation. The observation sheet is very useful to help researchers identify problems that occur in the classroom. Details of student activities that arise before the application of the solution can help researchers review the changing conditions that occur after the application of the guided inquiry learning model. The act of observation used by the researchers uses an observation sheet as a guide to make observations or in order to obtain accurate data in observations. To obtain data related to student behavior or previous class conditions, the researchers conducted discussions with mentor. Giving assignments to students is useful for obtaining data on student activity toward the implemented solutions. The data obtained during the study were also validated by several literature reviews. Some documentation in the form of lesson plans, reflection journals and feedback are also used by researchers as sources of supporting data that help researchers analyze the benchmarks of the learning model applied to students.

4. Results and Discussion

Online learning also has problem that occurs during face-to-face learning, namely the lack of student activity. If studied anthropologically, student inactivity is not in accordance with human nature which requires communication as social beings and to shape students' mindset. The mindset and knowledge possessed by students will be less useful if they can not be communicated to others or beneficial to others. In addition, through activeness, students can realize that they are unique individuals and have abilities that are bestowed by God so that reasons for choosing inactivity can be minimized. Therefore, every student has the opportunity to express themselves in learning through student activity in learning.

We as God's image and likeness should also represent the active characteristics of God. Humans must try to reflect the characteristics of God in every human activity, such as active, purposeful, loyal, moral, responsible, creative and has freedom (Graham, 2003). God actively created the universe and all its contents and sustains all of creation until the end, so students as humans can apply their activeness in learning and are responsible for developing every potential within themselves. Erickson (2013) also supports that humans are given the responsibility by God to manage the earth He created, and in carrying out this mandate requires the ability to study God's creation as the highest form of responsibility for God's creation.

The nature of sin has damaged the order of human life which was created by God in the beginning, but through the sacrifice of Christ on the cross, humans are given the opportunity to live according to God's will and have a relationship with God. The relationship between human doctrine and Christ's doctrine is that humans who are given knowledge, truth and holiness must have distance from sin, but God as a mediator helps humans to try to live according to God's Word (Berkhof, 1993). Students also have the same opportunity to return to active life according to the characteristics of God. This also does not mean that the teacher has perfectly lived according to God's teachings, but this is an opportunity for the teacher as God's co-worker who has been previously formed and equipped with the knowledge of educating students. So it is expected that teachers can guide students to collaborate with teachers to achieve learning goals.

One of the teacher's efforts to help students take advantage of the work of salvation that God has given to humans is to provide a place for students to apply the talents and knowledge that God has given to students. One of these containers is to provide a variety of learning models. If the learning model is generally dominated by the teacher, this will further increase the limitations of students to be active during online learning. Therefore, the authors apply the guided inquiry learning model as a solution that can seek student activity. The following are 6 forms of action that have been taken by the authors when applying the guided inquiry learning model.

 Orientation The teacher reminds students to be ready to take part in learning, motivates students to be active during learning so that teachers can ensure students understand the concept of the material, review lessons and convey an overview of learning activities, namely the teacher will provide a topic that will be completed by students. Presenting problems The teacher presents the problem topic as a stimulus for students. Making a The teacher guides students to actively provide students' initial opinions based on these problems before conducting group discussions. Gathering information The teacher provides an opportunities for students to discuss in the breakout room, access videos from the teacher, seek information from various sources and answer guiding questions that have been provided by the teacher. Test the the results of group discussions or the results of student searches through various sources. The teacher conveys to the students that those who present are not group leaders, this is to provide opportunities for students to be active in learning. Formulating conclusions The teacher provides opportunities for students so that students can volunteer to conclude the knowledge that has been obtained by students so as to form an answer to the problems given by the teacher. 	No.	Stages	Teacher's actions
 problems Making hypothesis The teacher guides students to actively provide students' initial opinions based on these problems before conducting group discussions. Gathering information Gathering information The teacher provides opportunities for students to discuss in the breakout room, access videos from the teacher, seek information from various sources and answer guiding questions that have been provided by the teacher. Test the hypothesis Test the results of group discussions or the results of student searches through various sources. The teacher conveys to the students that those who present are not group leaders, this is to provide opportunities for other students to be active in learning. Formulating conclusions Formulating conclusions Formulating conclusions 	1.	Orientation	learning, motivates students to be active during learning so that teachers can ensure students understand the concept of the material, review lessons and convey an overview of learning activities, namely the teacher will provide a topic that
 hypothesis initial opinions based on these problems before conducting group discussions. 4. Gathering information The teacher provides opportunities for students to discuss in the breakout room, access videos from the teacher, seek information from various sources and answer guiding questions that have been provided by the teacher. 5. Test the hypothesis the teacher provides an opportunity for each group to convey the results of group discussions or the results of student searches through various sources. The teacher conveys to the students that those who present are not group leaders, this is to provide opportunities for other students to be active in learning. 6. Formulating The teacher provides opportunities for students so that students can volunteer to conclude the knowledge that has been obtained by students so as to form an answer to the problems given by the teacher. 	2.	0	
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 hypothesis the results of group discussions or the results of student searches through various sources. The teacher conveys to the students that those who present are not group leaders, this is to provide opportunities for other students to be active in learning. Formulating conclusions The teacher provides opportunities for students so that students can volunteer to conclude the knowledge that has been obtained by students so as to form an answer to the problems given by the teacher. 	4.	0	the breakout room, access videos from the teacher, seek information from various sources and answer guiding
conclusions students can volunteer to conclude the knowledge that has been obtained by students so as to form an answer to the problems given by the teacher.	5.		the results of group discussions or the results of student searches through various sources. The teacher conveys to the students that those who present are not group leaders, this is to provide opportunities for other students to be active in
Source: Author Portfolio		conclusions	students can volunteer to conclude the knowledge that has been obtained by students so as to form an answer to the

Table 1. Application of the stages of the guided inquiry learning model

Source: Author Portfolio

The stages in the table above illustrate that most of the activities are carried out by students but still collaborate with the teacher, for example, students provide hypotheses, look for data, and test hypotheses to conclude them. These various activities make

students contribute more in learning so that they can strive for student activity during online learning. After implementing the above stages, the authors evaluate that there are differences in student responses or actions before and after the application of the guided inquiry learning model. The following is the data after the application of the guided inquiry learning model as a form of seeking the activeness of class X students in online learning.

No.	Indicator		After the application of the guided
		the guided inquiry	inquiry learning model
		learning model	
1.	Carry out a task	5 students were late in	1 st meeting: 2 students do not
		submitting	collect.
		assignments.	2 nd meeting: 17 out of 18 students
			collected on time.
			3 rd meeting: all students collect on
2.	Answering /	Only 3 out of 18	time. 1 st meeting: 5 students
۷.	•	students responded to	2 nd meeting: 4 students
	problems given by	•	3 rd meeting: 8 students
	the teacher		U U
3.	Ask a question to	Nobody asked.	1 st meeting: 2 students
	the teacher/friend if		contact the teacher personally.
	you don't		
4	understand	These and O students	1 st meetings 1 and of 10 atomic
4.	7 0	There are 8 students who have not	1 st meeting: 4 out of 18 students who collected, answered
		collected in the class	incorrectly on asynchronous notes.
	solving	notebook.	2 nd meeting: all students actively
	0		seek information.
5.	Carry out class	Only 5 students	1 st meeting: 7 students chat
	activities instructed	responded to the	response.
	by the teacher in the	teacher's instructions	2 nd meeting: 12 students chat
	form of responding	in Teams.	responses.
	to chat and group discussions	What fills the padlet: 1 st question answered	Initially there were 4 groups who took the initiative to share screen
	according to the	by : 18 students	and actively discussed and 2
	teacher's	2 nd question answered	-
	instructions	by : 14 students	gave directions and asked the 2
		The 3 rd question was	groups who were passive the
		answered by: 13	problems.
		students.	

 Table 2. Data before and after the application of the guided inquiry learning model

Source: Author Portfolio

From the table 2 it can be concluded that the application of the guided inquiry learning model can make students active during online learning. The authors' mentor also conveyed in the feedback that the application of guided inquiry learning that had been applied by the author could facilitate and strive for student activity. In the feedback, it is also stated that the authors always try to provide opportunities for students who rarely comment or respond to teachers.

In the first indicator regarding doing the task, when starting to apply the guided inquiry model (first meeting) there were still 2 students who did not do the task. When learning, the authors as the teachers have reminded students firmly to be responsible for the assignments given and also reminded them not to be late in submitting assignments and be aware of the due date. This affirmation is very useful for students because they are also individuals who have a sinful nature so it is possible to have a lazy or irresponsible attitude. After the author contacted students who did not do assignments, it turned out that 1 student who was still had confusion about the material and 1 student who was not aware to the due date.

The second indicator is about answering/responding to problems, initially only 4 out of 18 students were active and it happened repeatedly. Therefore, the authors wanted to ask other students by doing a variety of questions, namely providing a guiding statement so that students could remember the material related to the questions asked and can actively answer questions. The result is 1 student who could answer. If it is reviewed at the second meeting there are 4 active students by providing hypotheses on a problem that made students think critically, this can prove that the stages in the guided inquiry learning model can facilitate students to actively give opinions when compared to the teacher only lecturing.

The third indicator is the activeness of asking questions, during learning no students ask questions even though the authors have motivated and stimulated students to ask questions. Therefore, the teacher must be aware that the courage that students have is different, so the author gives the opportunity for other students if they have questions to contact the teacher personally. As a result, there was 1 student who contacted the author personally and the authors explained the concept of the number of atoms that have a charge on an element. In the fourth indicator regarding the activeness of students to try to find various information needed for problem solving, all students used various reference sources to answer guiding questions related to a problem given by the teacher. The authors have provided interactive videos that students could observe to support problem solving. The authors analyzed 2 things that can influence students to work, namely including interactive videos that attract students' attention to work on the problem and grouping students to discuss with each other so that each student feels they have a responsibility and can help each other.

The fifth indicator is the students' desire to carry out learning activities instructed by the teacher, in the form of discussing in groups and responding to the instructions given by the teacher. If analyzed the cause of the increase is the teacher who always reminds students to respond to teacher instructions in Microsoft Teams and conveys the goal is to help teachers know the number of students who have understood each learning instruction from the teacher and this is one of the character building for mutual respect. In addition, with a variety of learning activities in the form of group discussions

5. Conclusion

Based on the results of research and discussion, we can conclude that the application of the guided inquiry learning model can strive for student activeness in online learning. The improvement includes students doing assignments, answering or responding to teacher questions, asking if they don't understand the material, looking for various information for problem solving and conducting class activities in the form of group discussions, or responding to teacher instructions. The activeness of these students can be triggered because of the clear and complete instructions given by the teacher, making it easier for students to lead to learning materials. The application of this guided inquiry learning model can be more effectively successful if there is good cooperation between the teacher and the student, in this case when the teacher gives clear and interesting instructions, then the student can be motivated to do the task and the inquiry process is more effective. During the application of the guided inquiry learning model, each student has various courage and abilities, therefore teachers are more active in designing learning models that can trigger the activeness of all students by considering the characteristics and needs of the students. Whatever the design of learning, the teacher must be able to lead students to have the ultimate goal of knowledge which is to live more and more like Christ as the creator of the universe.

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References

- Ariani, M., Hamid, A., & Leny. (2015). Improving Science Process Skills and Student Learning Outcomes on Colloidal Material with a Guided Inquiry Model in Class XI science 1 students of SMA Negeri 11 Banjarmasin. QUANTUM, Journal of Science Education Innovation, 6(1), 98-107. doi: <u>http://dx.doi.org/10.20527/quantum.v6i1.3242</u>.
- Berkhof, L. (1993). Systematic Theology: The Doctrine of God. Jakarta: Indonesian Evangelical Reformed Institute.
- Dewi, E. K., A., H. N., Lunica, M., & Fitriani, S. R. (2020, December). Identify the Level of Activeness of Junior High School Students in Learning. MATH LOCUS: Journal of Mathematics Education Research and Innovation, 1(2), 78-84. doi: <u>https://doi.org/10.31002/math%20locus.v1i2.1084</u>.

Erickson, M. J. (2013). Christian theology. Ada, Michigan: Baker Academic.

- Firdausichuuriyah, C., & Nasrudin, H. (2017). The implementation of the application of the guided inquiry learning model to improve students' critical thinking skills in the material of llektrolite and non-electrolyte solutions of class X SMAN 4 Sidoarjo. Journal of Chemical Education, 6(2), 184-189. Retrieved from http://jurnal.umpwr.ac.id/index.php/radiasi/article/view/468/332.
- Graham, D. L. (2003). Teaching redemptively: Bringing grace and truth into your classroom. UK: Purposeful Design Publications.
- Jamaluddin, Asfar, A. M., & Asfar, A. M. (2020). Train Higher Order Thinking with the GO CAR Learning Model. Sukabumi: CV Jejak.
- Jundu, R., Tuwa, P. H., & Seliman, R. (2020). Science Learning Outcomes of Elementary School Students in Disadvantaged Areas with the Application of Guided Inquiry Learning Models. Journal of Education and Culture, 10(2), 103-111. doi: <u>https://doi.org/10.24246/j.js.2020.v10.i2.p103-111</u>
- Krismayeni, P.M., Sudhita, I. W., & Dibia, I. K. (2016). Application of Guided Inquiry Learning Model to Improve Activeness and Learning Outcomes of Mathematics. E-Journal PGSD Ganesha University of Education, 4(1), 1-10. doi: <u>https://doi.org/10.21831/jipi.v3i2.14871</u>.
- Kusumawardani, W., Maridi, & Muzayyinah. (2016, October). Increased Activeness of Asking through Guided Inquiry of Class X Mia 6s Sma Negeri 1 Karanganyar Students for the 2015/2016 Academic Year. Bio-Pedagogy, 5(2), 43-47. Retrieved from <u>https://jurnal.fkip.uns.ac.id/index.php/pdg/article/view/9756</u>.
- Martinis, Y. (2007). Teacher Professionalization & Implementation of KTSP. Jakarta: Echo persada Press.
- Natalia, M., Joseph, Y., & Ermadianti. (2013, February). Application of Guided Inquiry Learning Strategies to Improve Scientific Attitudes and Biology Learning Outcomes of Grade VII Students of SMP Negeril 14 Pekanbaru School Year 2012/2013. Journal of Biogenesis, 9(2), 28-38. doi: <u>http://dx.doi.org/10.31258/biogenesis.9.2.28-38</u>.
- Nurhayati, E. (2020). Increasing Student Activity in Online Learning through Quiziz Educational Game Media during the Covid-19 Prevention Period. Journal of Paedagogy: Journal of Educational Research and Development, 7(3), 145–150. doi: <u>https://doi.org/10.33394/jp.v7i3.2645</u>.
- Sani, R. A. (2019). HOTS (Higher Order Thinking Skills) Based Learning Revised Edition. Tangerang: Tira Smart.
- Sani, R. A. (2021). Minimum Competency Assessment Oriented Learning. Jakarta: PT Bumi Aksara.
- Sareong, I. P., & Supartini, T. (2020). The Relationship between Teacher and Student Interpersonal Communication towards Student Learning Activity at Pelita Kasih Christian High School Makassar. Journal of Theological Sciences and Christian Religious Education, 1(1), 29. <u>https://doi.org/10.25278/jitpk.v1i1.466</u>.
- Setiawati, R., Fatmaryanti, S. D., & Ngazizah, N. (2013). Development of Guided Inquiry-Based Modules to Optimize Students' Scientific Attitudes on the Subject of Dynamic Electricity at SMA N 8 Purworejo Class X Academic Year 2012/2013. Radiation, 3(1), 24-27.

http://jurnal.umpwr.ac.id/index.php/radiasi/article/view/468/332.

Setiyawan, D., Indrowati, M., & Nurmiyati. (2016, April). Comparison of Discovery Learning 276

Models Assisted by Concept Maps and Discovery Learning Models to Understanding the Concept of Protist Material for Class X Sma Negeri 1 Sukoharjo Students for the 2014/2015 Academic Year. BIO-PEDAGOGY, 5(1), 51-55. doi: https://doi.org/10.20961/bio-pedagogi.v5i1.5410.

- Sobron, A. N., Point, S., & Meidawati, S. (2020). Journal of Research Innovation. Journal of Research Innovation, 1(3), 265–276. Retrieved from http://jurnal.umpwr.ac.id/index.php/radiasi/article/view/468/332.
- Susanto, A. (2014). Development of Social Studies Learning in Elementary Schools. Jakarta: Prenadamedia Group.
- Wibowo, N. (2016, May). Efforts to Increase Student Activity through Learning Based on Learning Styles at Smk Negeri 1 Saptosari. Journal of Electronics, Informatics, and Vocational Education (ELINVO), 128-139. doi: <u>https://doi.org/10.21831/elinvo.v1i2.10621</u>.
- Zamratul, A., Nirvana, H., & Marjohan. (2018). Contribution of Teacher Strengthening of Subjects and Students' Self-Confidence towards Student Activity in Learning. Biblio Couns : Journal of Counseling and Educational Studies, 1(1), 1-11. doi:https://doi.org/10.30596/bibliocouns.v1i1.1941. Retrieved from http://jurnal.umpwr.ac.id/index.php/radiasi/article/view/468.



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