

## PENGEMBANGAN BAHAN AJAR PEMROGRAMAN DASAR BERBASIS MEDIA SOSIAL INSTAGRAM SEBAGAI ALTERNATIF PEMBELAJARAN DARING DALAM KONDISI PANDEMI COVID-19

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### Abstrak

Penelitian ini bertujuan: 1) mendeskripsikan bahan ajar, 2) kevalidan, 3) kepraktisan, 4) keefektifan, 5) respons pendidik dan peserta didik terhadap pengembangan bahan ajar pemrograman dasar berbasis media sosial Instagram sebagai alternatif pembelajaran daring dalam kondisi pandemi Covid-19. Jenis penelitian ini, adalah Research and Development (R&D) dengan menggunakan model pengembangan Borg dan Gall. Penelitian ini dilaksanakan di SMK Negeri 1 Bulukumba. Subjek uji coba adalah ahli instrumen penelitian, ahli materi bahan ajar, ahli desain media pembelajaran, pendidik mata pelajaran pemrograman dasar, dan peserta didik kelas X Teknik Komputer dan Jaringan (TKJ). Teknik pengumpulan data dilakukan dengan mengisi lembar validasi, angket respons pendidik, peserta didik dan tes pemrograman dasar. Hasil penelitian menunjukkan bahwa: 1) bahan ajar pemrograman dasar berbasis media sosial Instagram yang telah dikembangkan terdiri dari beberapa topik materi pembelajaran, 2) bahan ajar pemrograman dasar berbasis media sosial Instagram yang telah dikembangkan telah valid digunakan karena kriteria kevalidan telah terpenuhi, nilai rata-rata validitas ahli instrumen 4,0 berada pada kategori sangat valid, ahli materi bahan ajar 3,9 berada pada kategori sangat valid, dan ahli desain media pembelajaran 4,0 berada pada kategori sangat valid, 3) bahan ajar pemrograman dasar berbasis media sosial Instagram yang telah dikembangkan telah praktis karena kriteria kepraktisan telah terpenuhi dengan nilai rata-rata presentase respons peserta didik yang menyatakan setuju dengan butir angket yang ditanyakan =90.10%, 4) bahan ajar pemrograman dasar berbasis media sosial Instagram yang telah dikembangkan telah efektif karena kriteria keefektifan telah terpenuhi dengan rata-rata nilai posttest adalah 87.14%, 5) respons pendidik terhadap bahan ajar pemrograman dasar berbasis media sosial Instagram rata-rata 3,6 dengan kategori sangat baik, dan respons peserta didik terhadap bahan ajar pemrograman dasar berbasis media sosial Instagram adalah 90,10% dengan kategori sangat baik.

### Abstract

*COVID-19 has serious impacts on various sectors, including educational system. This writing aims to see the impact of the Covid-19 pandemic on learning in Indonesia. As for the background of this writing because how Covid-19 pandemic has a tremendous impact on education, such as learning methods, students' achievement, and teachers' struggles. Many schools around the world are closed to stop the spreading of Covid-19 virus. Even though there is a pandemic, the learning process must run smoothly so that education does not go out. With the help of the internet, online learning will be easier to do even though there are still some obstacles in its implementation. The government has begun to decide to implement a policy to close schools and begin to apply learning methods with an online system (from home). However, this has several impacts for students as well for teachers. Therefore, there must be some efforts or solutions to solve the problems for the educational system as well as new learning methods.*

**Keywords:** Covid-19, Online Learning, educational system.

## I. INTRODUCTION

COVID-19 is a disease caused by a new coronavirus called SARS-CoV-2. WHO first became aware of the new virus on December 31, 2019, following reports of a cluster of 'viral pneumonia' cases in Wuhan, People's Republic of China (World Health Organization. 2020). COVID-19 is caused by the SARS-CoV-2 virus, which spreads between people, especially when an infected person has close contact with another person. The virus can spread from the mouth or nose of an infected person in tiny fluid particles when they cough, sneeze, talk, sing, or breathe heavily. These liquid particles come in different sizes, ranging from larger 'breathing droplets' to smaller 'aerosols'.

Other people can catch COVID-19 when the virus gets into their mouth, nose or eyes, which is more likely when people have direct or close contact (less than 1 meter) with an infected person. Recent evidence suggests that the main way the virus spreads is through respiratory droplets between people in close contact with each other. Aerosol transmission can occur in certain settings, especially indoors, in crowded and inadequately ventilated spaces, where infected people spend long periods of time with other people, such as restaurants, choir practice sites, fitness classes, nightclubs, offices and / or a place of worship. More research is being done to better understand the conditions under which aerosol transmission occurs outside of medical facilities where certain medical procedures, called aerosol-generating procedures, are performed.

The virus can also spread after an infected person sneezes, coughs, or touches surfaces, or objects, such as desks, doorknobs, and handrails. Other people can become infected by touching this contaminated surface, then touching

their eyes, nose, or mouth without having to clean their hands first (World Health Organization. 2020). Currently Covid-19 is a hot topic of conversation. In any hemisphere, corona still dominates public space. In just a short time, his name became a trending topic, discussed here and there, and was reported massively in print and electronic media. This virus spreads very quickly and has spread to almost all countries, including Indonesia, in just a few months. So the WHO on March 11, 2020, declared this outbreak a global pandemic.

Because WHO has designated the Corona virus outbreak as a global pandemic, this has led several countries to establish policies to impose lockdowns in order to prevent the spread of the corona virus. In Indonesia itself, a Large-Scale Social Restriction (PSBB) policy was implemented to suppress the spread of this virus. Because Indonesia is carrying out PSBB, all activities carried out outside the home must be stopped until this pandemic has subsided.

The Covid-19 pandemic is an obstacle for all people in the world and this is also a health crisis for humans. In the world of education, the Covid-19 pandemic has also had a tremendous impact. Many schools around the world are closed to stop the spread of Covid-19. With the closure of schools, the government took steps so that the learning process was not left behind and students still received the right to gain knowledge. Therefore, the next government decision is that the learning process continues but not face-to-face but online.<sup>1</sup> The use of technology, which had previously been mainly used as a secondary work support or even for recreation, has turned into a primary work facility.

The government has begun to decide to implement a policy to dismiss students and begin to apply learning methods with an online system. This government policy came into effect in several provinces in Indonesia on Monday, March 16, 2020, which was also followed by other provinces (BDK Jakarta Ministry of Religion RI., 2020). Online learning is a form of distance learning / training using telecommunications and information technology, for example the internet, CD-ROOM (directly and indirectly). Online learning connects learners (learners) with learning resources (databases, experts / instructors, libraries) who are physically separated or even far apart but can communicate with each other, interact or collaborate (directly / synchronously and indirectly / asynchronously) (Rosali, Ely Satiyah. 2020).

*Online learning* is a system that can facilitate students to learn more widely, more and more varied. Through the facilities provided by this system, students can study anytime and anywhere without being limited by distance, space and time. The learning material being studied is more varied, not only in verbal form, but also more varied such as visual, audio, and motion (Riyana, 2020). This kind of learning system is implemented through a personal computer (PC) or laptop connected to an internet network connection. Teachers can learn together at the same time using groups on social media such as WhatsApp (WA), telegram, Instagram, zoom applications or other media as learning media. Thus, the teacher can ensure students take part in learning at the same time, even in different places.

With the enactment of this regulation, it has an impact on both students and teachers. Therefore, the authors are interested in discussing the impact of the Covid-19 pandemic on learning. In this discussion, the authors describe what impacts are obtained and

felt by students and teachers in this online learning process.

## II. DISCUSSION

### Impact of the Covid-19 Pandemic

Due to the Covid-19 pandemic, learning that was previously carried out offline has been replaced by online learning. This also results in an impact on teaching and learning activities. There are several impacts felt by students and teachers due to the Covid-19 pandemic, such as:

#### 1. Impact on students

The Covid-19 pandemic requires students to study remotely and study at home with guidance from parents. Due to this pandemic, students are lacking in preparing themselves. Such as the motivation of students who are lacking in participating in online learning. Students who usually participate in class learning with friends - friends must be faced with studying at home alone so that students feel bored. Then long holidays that are too long make students bored and bored, making them want to leave the house.

Inadequate facilities are one of the reasons why students are less motivated to participate in online learning. Students must be faced with an online system where learning is in the form of theory. What usually students do practice for subjects that require practice because of the Covid-19 pandemic, making the delivery of this material is only theoretical. This causes students to be slow in absorbing learning, especially when viewed from the absorption capacity of different students. There are some students who are quick to pick up on learning but there are also some who are slow to absorb learning so that these students will be left behind in the learning.

There are fundamental disadvantages for students when there is a school or campus closure. There are many exams that should be done by students in normal conditions, now

suddenly because of the impact of Covid-19, the exams are canceled or postponed. Internal assessments for schools may be considered less urgent but for students' families, information on assessment is very important. Some think that the loss of student assessment information is very meaningful for the sustainability of the student's future. For example, students who have been able to master many skills this year but did not get the assessment they should have this year so that it will have an impact on treatment for the coming year (Aji, Rizqon Halal Shah, 2020).

Then students will lose their social life, if at school they can play interacting with their friends, but this time they cannot and are alone at home with their parents, interaction with fellow friends, teachers and people at school will be reduced. The Covid-19 outbreak forces students to use technology, so like it or not, they have to learn and be ready to teach remotely using technology.

According to Watjatrakul (2016) neuroticism and openness to experience affect students' intention to adopt online learning through the five perceived values of online learning. In particular, students who are open to experience pay more attention to the quality of online learning. More neurotic students avoid the stress of studying in unfamiliar situations. In addition, students tend to adopt online learning when they feel online learning meets their emotional and social needs.

## 2. Impact on teachers

The impact felt by teachers is that not all are proficient in using internet technology or social media as a learning tool, some senior teachers are not yet fully able to use tools or facilities to support online learning activities and need assistance and training first. And the competence of teachers in using technology will affect the quality of the teaching and learning program. Therefore, before the online learning

program is held, teachers are required to be given training first. What is the impact felt by the teacher, namely on the online teaching and learning process at home without adequate facilities and infrastructure at home. Teacher competence in utilizing technology and mastering technology for learning is required to increase rapidly in response to online Home Learning. Teacher and school communication with parents must be maintained smoothly. Unlimited working hours because they have to communicate and coordinate with students, parents, other teachers, and school principals. Not every teacher quickly adopts and learns technology, so as the coordinator of my work hours are not limited to weekdays. Saturday and Sunday evenings are still required morally and responsibly to prepare teachers who still need support to carry out home learning (Purwanto, 2020).

## **Efforts and Solutions for Indonesia's Education**

In handling the impact of Covid-19 on the world of education, all stakeholders must work hand in hand. This condition cannot be separated from the perspective of government policy and its implementation in the field. The things that must be done by all education stakeholders are:

### 1. Government

The role of government is very important and fundamental. The budget allocation that has been decided by Presidential Instruction Number 4 of 2020 concerning refocusing activities, budget relocation, and procurement of goods and services in order to accelerate the handling of Covid-19 must be implemented immediately.

### 2. Parents

Parents as primary educators in the household must carry out their functions. This should open up the horizons and responsibilities of

parents that the education of their children must be returned to the efforts of the parents in educating the mental, attitude and knowledge of their children.

3. Teacher

Online learning steps should be as effective as possible. The teacher does not burden students with tasks that are delivered in studying at home. The teacher is not only positioned as a transfer of knowledge, but still prioritizes *ing ngarso sung tulada, ing madya mangun karsa, tut wuri handayani*.

4. School

Schools as educational providers must be prepared to facilitate any changes regarding the education of their students. Behavioral education must become a strong foothold amidst technological developments and the accelerated flow of information. Educational programs carried out by schools must really be conveyed to students, especially with online media, but schools must pay attention to ethics as an educational institution. Emphasis on learning at home to students must be properly controlled so that teachers who teach through crisp media remain smooth and smart in delivering lessons that must be understood by students.

According to Elvia R. Shauki, Ph.D, a lecturer at the Faculty of Economics and Business, University of Indonesia (FEB UI), total offline learning is certainly not the right choice during a pandemic, but online methods also have shortcomings in terms of engagement and deepening of material between teacher with students. The advantages of online methods lie in the level of flexibility and the presence of pacing (breaks) between materials.

One of the strategies that can be used in online methods is the use of a personalized method in the discussion

system, teachers can provoke discussion and test students' understanding through calling their names one by one. According to him, the discussion session is something that must be carried out in the online learning method. Elvia said that in the online method, teachers provide a maximum of 30 minutes of material so that students can stay focused. The remainder of the lesson must be done using the discussion method, either group discussions or class discussions. Online group division can be done with features in learning media such as Zoom, Google Classroom, and Microsoft Teams.

### III. CONCLUSION

From the data that has been described and explained by the author, it can be concluded that the Covid-19 pandemic has made things more difficult. Many sectors have been affected, one of which is the educational system. Learning has to be done from home or online, because it is not possible to do learning as usual (offline or face to face). Many of the impacts felt by students, such as: lack of motivation, feeling bored and bored, inadequate facilities, lack of socialization, and other impacts. Just like students, teachers also feel the impact of the Covid-19 pandemic on the learning process. such as: many teachers are less technologically proficient, inadequate facilities, and other things. Even though online learning is easy to do because you don't need to come directly to the place, distance learning has several obstacles while taking place, including:

1. Requires high self-control from outside distractions
2. Less flexible learning methods
3. Inadequate media (network and facilities)

In addition, what is terrifying is that distance learning if done continuously and with tedious methods or techniques will have an impact on students, namely:

1. Mental health may be impaired
2. Delay in learning

3. Worried and anxious thoughts arise

For this reason, efforts and strategies need to be made to overcome these impacts on learning in Indonesia. All stakeholders must work hand in hand and work together to overcome this. In terms of teaching, it can be replaced with new methods so that the teaching and learning process does not feel bored and bored.

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