

Integration of Digital and Non-digital Learning Media to Advance Life Skills of Elementary Education Students Post Pandemic Covid-19

by Ahmad Izzuddin

Submission date: 31-Mar-2023 06:38AM (UTC-0400)

Submission ID: 2051934991

File name: 211-222_23._Wardana_et_al._ID_1984_1.pdf (847.11K)

Word count: 9450

Character count: 53593

Integration of Digital and Non-digital Learning Media to Advance Life Skills of Elementary Education Students Post Pandemic Covid-19

Ludfi A. Wardana¹, Afib Rulyansah^{2*}, Ahmad Izzuddin³, Rofikha Nuriyanti⁴

¹University of Panca Marga, +6282232072458, Jl. Kali Ciliwung, Griya Ciliwung No.15B, Kel. jrebeng kulon, kec. kedopok, Kota Probolinggo, East Java, Indonesia

²Universitas Nahdlatul Ulama Surabaya, +6285236868125, Jl. Raya Jemursari No.57, Jemur Wonosari, Kec. Wonocolo, Kota Surabaya, East Java 60237, Indonesia

³University of Panca Marga, +6285258999320, Dusun Tirta RT 013 RW 02 Desa Jabung Sisir Kecamatan Paiton Kabupaten Probolinggo, East Java, Indonesia

⁴University of Panca Marga, +6287757853500, RT 07 RW 02, Krajan, Brani Wetan, Maron, Kabupaten Probolinggo, East Java, Indonesia

ABSTRACT

The purpose of research is to analyse how digital and non-digital learning media can facilitate the development of life skills for fifth-grade elementary school students after the Covid-19 pandemic. This case-study research involved two elementary school teachers, one principal and one school supervisor in the Probolinggo district, East Java, Indonesia. The selection of learning media to develop life skills are: (a) teachers already have visual types of learning media in the form of pictures, flannel boards, specimens, folding paper and photographs, (b) student life skills developed through learning media are limited to knowledge competencies, namely academic skills, (c) constraints in the selection of learning media experienced by teachers in media analysis and needs analysis regarding the content of students' life skills. Academic, social, and vocational skills are analyzed and described in learning activities using learning media. After the Covid-19 pandemic, children's life skills are developed in the following ways: (a) academic skills, where students increase their motivation for the learning process and value learning outcomes; (b) social skills, where students' social interactions with their environment become more intimate, and communication between students and teachers becomes more frequent; and (c) vocational skills, where students more often participate in performance activities, portfolios, or projects, where their motivation is increased for the learning process and the value of learning outcomes. This research examines the impact of learning media on students' life skills. Also identified is how pupils' living skills alter after Covid-19.

Keywords: digital and non-digital learning media, life skills, post Covid-19 pandemic.

INTRODUCTION

The success of a learning process can be influenced by many things, one of which is environmental conditions (Zhang et al., 2020). Making the environmental conditions pleasant can be done by using technology media (Aka, 2017; Rulyansah &

Wardana, 2020). Research on Indonesian society shows that digital and non-digital technology-based media are the main means of getting information. Digital and non-digital media have an impact on academic skills. Norman and Furnes (2016) indicates the use of digital learning media slightly interferes with students' cognitive experiences, and non-digital deepens students' cognitive.

MEDIA PENETRATION

Internet is now on 3rd position among all media with 44% reach or equivalent with 24.2 million people

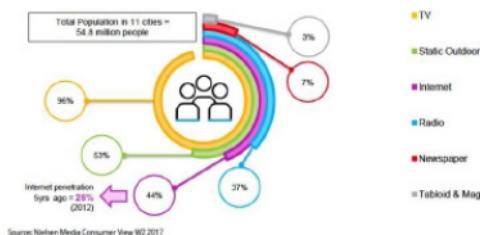


Fig. 1: The New Trend Among Indonesia's Netizen. Media Penetration (Wijayanti, Handayani, and Azzahro 2021)

Corresponding Author: afibrulyansah@unusa.ac.id

<https://orcid.org/0000-0003-2713-3770>

How to cite this article: Wardana LA, Rulyansah A, Izzuddin A, Nuriyanti R (2022). Integration of Digital and Non-digital Learning Media to Advance Life Skills of Elementary Education Students Post Pandemic Covid-19. Pegem Journal of Education and Instruction, Vol. 13, No. 1, 2022, 211-222

Source of support: Nil.

Conflict of interest: None.

DOI: 10.47750/pegegog.13.01.23

Received : 20.02.2022

Accepted : 27.05.2022

Published: 01.11.2022

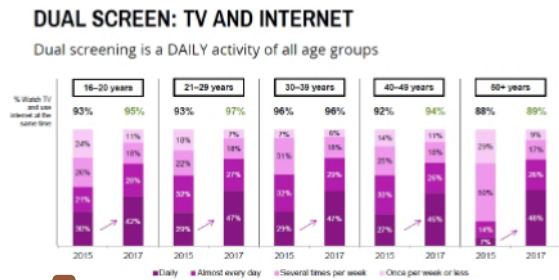


Fig. 2: The New Trend Among Indonesia's Netizen. Dual Screen: TV And Internet (Prawanti and Sumarni 2020)

Digital learning media are learning media that use digital technology (Mehrvarez, Heidari, Farrokhnia, & Noroozi, 2021). Digital technology learning media includes interactive multimedia, digital video, podcasts, augmented reality, virtual reality, and game-based learning (Bygstad et al., 2022). Non-digital learning media is in the form of visual media such as pictures, photos, graphs, charts, diagrams, and posters (Gan, Menkhoff & Smith, 2015). The situation above shows that the Indonesian people of all generations today cannot be separated from the incorporation of digital and non-digital-based media. Bringing the integration of digital and non-digital technology media can have a positive impact on the learning process, with an attractive environment creating an exciting learning atmosphere (Chia, Tay & Chua, 2019; Kereri, Kennedy & Kereri, 2022). The effectiveness of using digital learning media can present information to the millennial generation easily and quickly (Lesser, 2020). The use of digital and non-digital technology-based media is also very helpful for information on life skills that children need (Huber, Highfield & Kaufman, 2018; Yoyon et al., 2021). Further discussion of life skills in elementary school children focuses on General Life Skills which include personal skills, rational thinking skills, academic skills, social skills and basic vocational skills.

Life skills really need to be taught in elementary school institutions both before, during, and after the Covid-19 pandemic. Life skills refer to a set of socio-emotional abilities, attitudes and competencies that enable individuals to learn, make informed decisions and exercise the right to lead healthy and productive lives and subsequently become agents of change (UNICEF, 2019). Life skills training conducted during vocational education helps improve children's quality of life (Kim 2021; Nugraheni, 2021). The development of life skills, such as critical thinking, steadfastness, a growth mindset, and the ability to work in teams, has been widely carried out by universities (Hacisalihoglu et al. 2020).

Life skills have inherited skills that support human life. Life skills require students to solve life problems not only with academic skills, but also other skills (Wurdinger, Newell & Kim, 2020). Academic skills in the form of skills in completing

learning tasks at school. Other skills are social skills (how to communicate and socially interact) and vocational skills (how to work in solving problems) (Atkins et al., 2020; Sarah, Hia & Purba, 2022). Life skill skills provide benefits for students to sort out positive information according to their needs.

Teaching life skills in elementary schools requires innovation and creativity among students. Learning media (Umamah, Surya & Muffida, 2021) and appropriate learning environment conditions (Wardana & Hasanah, 2019) can facilitate students in expressing creativity and innovation. Project-based learning combined with IT learning media and involving children's real world contexts can result in maximum students' life skill development (Wahyuni & Zainnuri, 2017), especially after Covid-19 hit all countries. This shows that the right learning media has a positive impact on the development of students' life skills. The provision of learning media makes a good contribution to the learning process, with an attractive environment it will create an exciting learning atmosphere (Chachil et al. 2015).

State-of-the-art works related to the use of learning media to develop life skills have been carried out, but there is very limited information about developing life skills for elementary school students through the simultaneous use of digital and non-digital learning media. Ritonga, Ritonga and Septiana (2021) reported that the use of conventional crossword puzzles that met the HOTS standards could train high school students' creativity, innovation, critical thinking, and depth. This indicates that conventional crossword puzzles can develop students' life skills. Furthermore, Jaya, Iryoko and Suhaeb (2018) explained that learning with the help of learning media can facilitate the development of vocational skills for students with special needs in special schools. On the other hand, Puspitasari, Ummah and Pambudy (2013) developed a learning media "KIDEA" that can improve students' life skills by using a Kinect sensor solution that allows users to interact with computers through a natural user interface in the form of movement and sound.

The purpose of this study is to analyse the use of digital and non-digital learning media to develop students' life skills in fifth-grade learning in elementary schools. This study describes how to choose learning media, activities that use learning media, and describes activities that use learning media. This study also identifies how students' life skills change after the Covid-19 period. More in-depth discussion, it is hoped that in this era of globalization, learning media in the future can facilitate students in growing life skills.

The content in this learning media adapts to the 2013 curriculum implemented by the government in elementary schools. In the context of fifth-grade elementary school there are 53 basic competencies so that there are nine discussion themes and each discussion theme consists of three sub-themes, in other words, there are 27 discussion sub-themes for

one year (Moniaga et al. 2019). Basic Competencies Theme 4 Globalization Around Me. Sub Theme 1 Globalization which is described in learning indicators, learning activities and life skills activities.

METHODS

This study used a qualitative research approach, because the existing situation was trying to be described in its own condition. Interviews were designed for participants to support their experiences, stories and views. Through narrative stories to find out the description made about the assessment and interpretation of certain experiences that have been carried out. Narratives could connect facts with one another so as to find and interpret the truth of the phenomena that occur (Doyle, 1997).

This qualitative approach explored through careful analysis the use of digital and non-digital learning media to develop children's life skills. A description and in-depth examination of the case of selecting learning media, what activities used learning media and a description of the activities (Merriam & Tisdell, 2015). A case study was a research approach to carefully investigate a matter by collecting complete information using various data collection procedures with interviews, observations and documentation (Creswell, 2012).

Participant

The case study design was chosen because it accommodates the stated research objectives, case variability, and the context and wide range of data. The selected schools used a variable approach that varies. The choice of research subjects was because students were familiar with and used digital and non-digital learning media in 2018. Therefore, the selected school was designed to have students with social profiles from middle to high, heterogeneous student learning styles, complete facilities and infrastructure. The selected school has 42 students in grade V (22 students in grade VA and 20 students in grade VB), 19 teachers and 1 principal at an elite private elementary school in Probolinggo district, East Java, Indonesia. Class V was chosen because of the social profile background from middle to above, students were active from

auditory, visual and kinetic learning styles, and teachers had an early understanding of life skills and digital skills as well as supporting facilities. The explanation of the description of class V students in table 1.

In addition, this study involved 2 teachers from classes VA and VB, one principal and one school supervisor. Sample selection used purposive sampling method. The purposive sampling method was a non-probabilistic sampling method and the researcher determines the sample according to his own criteria (Cohen, L., Manion, L., & Morrison 2000). Sampling was based on cases that have predetermined criteria (Patton 2002). This study, looking at the problem of using the type of learning media in developing students' life skills is taken as a criterion.

Data Collection

The researcher collected the data through participant observation, in-depth interviews, and documentation studies. In addition, observations were conducted to observe the social situation at the research location. Participants' actions, statements, and interests are captured in brief notes for this kind of observation (Isaacs, 2018). An in-depth interview is a conversation between the author and the informant to obtain construction according to the research focus. This documentation study aims to obtain other data that have not been collected from interviews and direct observations, including education and education and training documents, curriculum, teaching plans, evaluation plans, photos, pictures, and recordings (Miles & Huberman, 2014).

Data collection was carried out in three stages in this study. In the first stage, interviewed 2 fifth-grade teachers, 1 principal and 1 school supervisor at the selected schools with semi-structured interviews with individual duration of 2 minutes. This stage aimed to see the initial understanding of the use of learning media. The second stage in this study consisted of teachers of class VA and class VB teachers with semi-structured interviews with varying times. This stage aimed to determine the initial understanding of life skills.

In the third stage, interviews were conducted with 2 fifth-grade teachers, 1 principal and 1 school supervisor at selected

Table 1: Description of class V A and V B.

The Description of the Classroom	The interviewed Teacher and staff	Qualification	The Amount of Student	Student learning style	Digital facilities and infrastructure
5th A (Years 9-11)	Classroom Teacher of 5th A grade Head Master, School supervisor.	Teacher: Bachelor, Head Mas ¹⁷ Bachelor School supervisor; Master Degree	20 ²⁰ dents (10 boys, 12 girls)	Visual: 7 students Auditory: 8 students Kinesthetic: 7 students	Laptop, internet, projector, sound speaker, podcast room.
5th B (Years 10-11)	Classroom Teacher of 5th B grade Head Master, School supervisor.	Teacher: Bachelor, Head Mas ¹⁷ Bachelor School supervisor; Master Degree	20 ²⁰ dents (8 boys and 7 girls)	Visual: 5 students Auditory: 9 students Kinesthetic: 4 students	Laptop, internet, projector, sound speaker,

schools using semi-structured interviews. This phase focused on questions based on the research objectives, namely the principal in the form of the availability of learning media, the availability of facilities and infrastructure, the support of the principal in developing life skills. School supervisors in the form of supervision of learning planning, supervision of facilities and infrastructure. Class V teachers in the form of choosing learning media, activities using learning media, descriptions of activities used, development of life skills before and after the Covid-19 Pandemic.

In addition to in-depth interviews, the methods used are observation and documentation. These documents are to support information related to the use of learning media to develop students' life skills. Observations were made to collect data related to the implementation of learning. Documentation in the form of learning tools used by teachers.

Data Analysis

Data analysis is presented by describing the data obtained. Qualitative data analysis is a process of reviewing, sorting and grouping data (Miles and Huberman, 2014). Then the data was analyzed according to discussions about the problem of using learning media in developing life skills in students after the Covid-19 pandemic. Data from interviews were in the form of recordings and transcripts of fifth-grade teachers, school principals and school supervisors. Observation data were in the form of field notes in the implementation of learning. The data that has been taken is coded (for example, W, GrA meaning the results of the class A teacher interview about the specific objective of the first study) to get the expected results of the analysis. Data analysis is the process of systematically reviewing and compiling all interview transcripts, field notes, and documentation written during data collection (Bogdan, R. C & Biklen, 1982). The final step was checking the validity of the data by means of triangulation of sources and techniques.

FINDING

Selection of learning media

Data collected from the results of interviews with VA and VB teachers in the selection of learning media to develop students' life skills found that teachers have learning media in the form of visual media. Visual media are in the form of pictures,

flannel boards and affixed folding paper. The use of this type of visual media is used on materials that require knowledge competence. The teacher understands about life skills but has not done a needs analysis to include life skill content in the selection of learning media. The obstacle found in the selection of learning media is that the teacher still has not carried out an analysis of basic competencies to be adapted to the life skills of students. This can be seen from the results of the interviews as follows in Table 2.

In table 1, the teacher has made the selection of learning media but only knowledge competence. Knowledge competence includes life skills, but only touches academic skills. The output of academic skills here is in the form of numerical scores from fifth-grade students of elementary school in Probolinggo, Indonesia. This is in line (Grogan, Henrich, and Malikina 2014) with those who say that academic skills are skills in completing learning assignments at school.

To strengthen the results of interviews, the data collected from the documentation shows that the media used by the teacher is a flannel board which is a type of visual learning media.

Based on the triangulation of sources and techniques, it can be concluded that the research findings regarding the selection of learning media to develop life skills are: (a) the teacher already has visual types of learning media in the form of pictures, flannel boards, specimens, folding paper and photographs, (b) students' life skills which is developed through learning media is limited to knowledge competence, namely academic skills, (c) constraints in the selection of learning media experienced by teachers in media analysis and needs analysis regarding student life skill content.

Activities that use learning media

Any activities that use learning media in developing the life skills of fifth-grade students can be classified into 3 types, namely: academic skills, social skills and vocational skills. The research findings are as follows.

Academic Skills

In this section, the researcher presents data about what activities use learning media in developing academic skills. The results of interviews from the teacher of class VA and the Principal of elementary school are as follows.

Table 2: Transcript of the interview results for the selection of learning media.

Indicator	Classroom Teacher of 5th A Grade	Classroom Teacher on 5th B Grade
The option of learning media.	"I have learning media that I use when learning in class. The types of media that I have are pictures, specimens, other media. The use of this media when I see the competence to be taught, I choose the one that fits the material. I haven't done a needs analysis to include life skill content. Needs analysis is seen from the basic competency analysis." (W, GrA, 1)	"The media I use are visual media, for example: pictures, flannel boards, and photographs. I understand life skills but I have not included them in the learning media that I use. In the knowledge competence there is already a life skill but it was not planned. The obstacle that I experienced in the selection of learning media was the difficulty in including the content of students' life skills in the learning media." (W, GrB, 1)

The results of the interviews in table 2 with the VA class teacher about any activities that use learning media to develop academic skills are group discussion learning activities using learning videos, experimental learning activities using motion visual media. Learning activities adjust to the basic competency analysis. This was corroborated by the results of the principal's interview which stated that academic skills learning activities and the use of learning media types saw the need for core competencies and basic competencies. This is in line with Khan and Masood (2015) that learning media adjusts the needs of basic competencies so as to create an exciting atmosphere for students.

To strengthen the results of interviews, data collected from observations in the form of field notes about any activities that use learning media to develop academic skills are as follows.

"On Friday, January 14, 2022 at 08.00-11.00 WIB, learning activities begin with greetings, prayers, attendance. After that, the teacher and 20 students started the initial learning activities by exploring the material about "Globalization in My Surroundings". In the core activity, the class VB teacher divides the class into small groups to discuss. The activity took place using learning videos and visual image media. Closing activities are carried out by concluding the results of the discussion of the material." (O, GrB, 2)

Based on the triangulation of sources and techniques, it can be concluded that the research findings on what activities use



Fig. 3: Flannel board types of visual learning media. (D, GrA, 1)

learning media to develop academic skills are: (a) learning activities carried out by teachers in the form of group discussions and experiments, (b) types of media used in group discussion learning activities in the form of learning videos, and (c) the types of media used in experimental learning activities in the form of specimens and motion visual media.

Social Skills

At this stage, the researcher presents data about what learning activities use learning media to develop students' social skills. Social skills are skills for social interaction and communication between humans. The results of the observation of learning activities on Tuesday, January 18, 2022 are as follows.

"On Tuesday, January 18, 2022 at 08.00 WIB, the researcher entered the VA class. It can be seen that teachers and students are ready to carry out learning activities. At 10.00 WIB, the teacher applied a problem-based learning model using the pair card learning media, the class was divided into small groups and discussed the problems given by the teacher. The students in the group were very enthusiastic. Student-student and student-teacher communication is very effective. At 12.00 WIB, the lesson ends with closing and prayer." (O, GrA, 2)

Learning activities carried out by class VA teachers are using pair card learning media through a problem based learning model. These activities can foster communication and interaction between students and between students and teachers. This is supported by Humienny and Berta (2018), the use of appropriate learning media can foster interaction between students. Reinforcing the results of observations that have been described previously, the results of interviews with school principals and school supervisors are as follows.

Based on the triangulation of sources and techniques, it can be concluded that the research findings on what activities use learning media to develop soft skills are: (a) learning activities carried out by teachers using problem-based learning models, (b) types of media used in problem-based learning models in the form of pair card media, and (c) social interaction and communication occurs when the use of pair card learning media between students and students and teachers.

Table 3: Transcript of interview results of academic skills activities.

Indicator	Classroom Teacher of 5th A grade	Head master of Elementary school
The use of learning media in academic skills learning activities.	"Academic skill learning activities refer to the core competence of knowledge. The learning activities that I do adjust their basic competencies, if they require group discussions, students have group discussions. The learning media used are: learning videos. Different basic competencies require experimentation, so learning activities are in the form of experiments. The media used are specimens, types of visual and motion media as well as experimental props." (W, GrA, 2)	"Class VA teachers carry out learning activities by analyzing basic competencies. Knowledge core competencies are the basis for skill academic activities. The activity looks at its basic competence if it demands discussion activities, then academic skill activities are discussions. Learning media adapts to these activities." (W, KS, 2)

Vocational Skills

At this stage the researcher presents data about any learning activities that use learning media to develop students' vocational skills. The results of the interview table from the VA and VB class teachers are as follows in Table 5.

In table 5, the results of teacher interviews are presented about what learning activities use learning media to develop vocational skills. The learning activities used are in the form of performance activities, projects and portfolios. The learning media used are flipcharts, display media and portfolio folders. The use of learning media in vocational skills adjusts the selection of basic competencies that require skill competencies. This is in line with (Akkuzu and Akçay 2011) that the selection of learning media considers the characteristics of students, basic competencies and the circumstances of the surrounding environment. To support the results of the interviews, Figure 2 provides an overview of the learning media used.

Based on the triangulation of sources and techniques, it can be concluded that the research findings on what

activities use learning media to develop vocational skills are: (a) learning activities in the form of performance, portfolios and projects, (b) media used by teachers in the form of display media, portfolio maps and flipchart, (c) the selection of learning media and learning activities in vocational skills according to the basic competencies that require skill competencies

Description of activities using learning media.

At this stage, it describes learning activities that use learning media that appeared in previous findings. The description is as follows.

Academic Skills

In the previous discussion, it has been found that learning activities that use learning media to develop students' academic skills are in the form of group discussions using learning video media and experiments using specimen, visual, motion learning media.

Table 4: Transcripts of interview results for social skills activities

Indicator	Head Master of Elementary school	School Supervisor
The use of learning media in social skills learning activities.	"I know the learning activities from the lesson plan that the teacher reports to me. Judging from the learning implementation plan, there are learning activities using a problem-based learning model using pair cards. The use of these learning models and media requires high communication and interaction." (W, KS, 2)	"Supervision that I did to the teachers in this elementary school, I saw that the lesson plans that were made had grown social skills. Growing social skills from the use of learning media and learning models in the classroom." (W,PS, 2)

Table 5: Transcripts of vocational skills interviews.

Indicator	Classroom Teacher of 5th A grade	Classroom Teacher of 5th B grade
The use of learning media in vocational skills learning activities.	"The use of learning media in vocational skills activities that I do looks at core competencies and basic competencies. Competence skills that require vocational skills. I use performance activities, project activities and portfolio activities to develop vocational skills. The learning media that I use are portfolio maps, flipcharts and display media. (W,GrA, 2)	"The learning media that I use for vocational skills are flipcharts and display media. The media adjusts the material and learning activities. For example, the activity of completing each child's portfolio assignment. The media I use is display media, after that the media is pasted on the classroom wall." (W, GrB, 2)



Fig. 4: Media display the results of student performance. (D, GrB, 2)

Based on the triangulation of sources, it can be concluded that the research findings about the description of learning activities that use learning media to develop academic skills are: (a) group discussions, namely first, students divide groups with teacher guidance. The two students watched the learning video in front of the class. The three students discussed according to the questions in the video. The four group representatives presented the results of group discussions in front of the class and other groups responded. The five students concluded the results of group discussions with the guidance of the teacher. The obstacles faced are only controlled by active students. (b) experiment, that is, first, students prepare equipment and materials according to the material. Both students saw the stages of implementation in the image media provided by the teacher. The three experiments were carried out under the guidance of the teacher. The four students presented the results of the experiment in front of the class. The five students concluded with the guidance of the teacher. The problem is that it takes a long time to prepare materials and tools.

Social skills

The findings of learning activities that use learning media to develop students' social skills are in the form of problem-based learning model activities through pair card media. Social interaction and communication occur when the use of pair card learning media between students and students and

students and teachers. The following is a description of the learning activities.

To strengthen the results of interviews, data collected from observations in the form of field notes about descriptions of activities using learning media to develop social skills are as follows..

“On Wednesday, January 26, 2022 at 08.00 WIB, the VA class teacher starts the lesson by saying greetings. The activity looked enthusiastic with greetings from 20 students. The teacher's initial activity explored the material on sub-theme 3 the effect of heat on life. The core activity is in the form of firstly students observing the problems that are in front of the class. The two students divided the groups according to their respective problems. The three students analyzed and presented alternative solutions to problems on paper in the form of cards. The four students paired the solutions in front of the class with the guidance of the teacher. The closing activity of students concludes the results of the discussion on the effect of heat on life. The teacher reflects on the learning that has been done. The clock shows 10.30 WIB, the learning ends with prayers and greetings.” (O, GrA, 3)

Based on the triangulation of sources and techniques, it can be concluded that the research findings regarding the description of learning activities that use learning media to

Table 6: Transcript of interview results description of academic skills learning activities.

Indicator	Classroom Teacher of 5th A grade	Classroom Teacher of 5th B grade
Description of activities that use learning media to develop academic skills.	“The activity is in the form of group discussions using learning video media. First, students divide into groups with the guidance of the teacher. The two students watched the learning video in front of the class. The three students discussed according to the questions in the video. The four group representatives presented the results of group discussions in front of the class and other groups responded. The five students concluded the results of group discussions with the guidance of the teacher.” (W, GrA, 3)	“I use experimental activities using visual media images. First, students prepare equipment and materials according to the material. Both students saw the stages of implementation in the image media provided by the teacher. The three experiments were carried out under the guidance of the teacher. The four students presented their experimental results in front of the class. The five students concluded with the guidance of the teacher.”(W, GrB, 3)
Constraints that occur in learning activities.	“The problem is that the discussion process is only controlled by active students.” (W, GrA, 3)	“The obstacle faced is quite a long time to prepare materials and tools.” (W, GrB, 3)

Table 7: Transcript of interview results description of social skills learning activities

Indicator	Classroom Teacher of 5th A grade	Head Master of Elementary School
Description of activities that use learning media to develop social skills.	“In this activity, I carried out problem-based learning model activities, in which students first observed the problems in front of the class. The two students divided the groups according to their respective problems. The three students analyzed and presented alternative solutions to problems on paper in the form of cards. The four students paired the solutions in front of the class with the guidance of the teacher. (W, GrA, 3)	“The description of the problem-based learning model activities using pair cards is carried out by the VA class teacher with the students first observing the problem. Second, organize students to learn. The third presents a solution with a pair of card media. Fourth, conclude learning with teacher guidance. (W, KS, 3)
Constraints that occur in learning activities	“The process of learning activities shows that some students lack initiative in problem solving.” (W, GrA, 3)	“Teachers have difficulty in classroom management in the learning process.” (W, KS, 3)

develop social skills are: (a) a description of the activities of the problem-based learning model, namely, first, students observe the problems in front of the class. The two students divided the groups according to their respective problems. The three students analyzed and presented alternative solutions to problems on paper in the form of cards. The four students paired the solutions in front of the class with the guidance of the teacher. Obstacles that occur in these learning activities are that some students seem less enthusiastic in solving problems and teachers tend to have difficulty in classroom management.

Vocational Skills

In the previous discussion, it was found that learning activities that use learning media to develop students' vocational skills are in the form of learning activities in the form of performance, portfolios and projects. The media used by the teacher are display media, portfolio maps and flipcharts. The following is a description of the learning activities.

To strengthen the results of the interviews, the data collected from the documentation results in the form of photos of the portfolio map to store the portfolio works of the VA class students as follows in Fig. 5.



Fig. 5: Media portfolio map stores student portfolio results. (D, GrA, 3)

Table 8: Transcript of interview results description of vocational skills learning activities.

Indicator	Classroom Teacher of 5th A grade	Head Master of Elementary School
Description of activities that use learning media to develop vocational skills.	"Performance activities in theme 7 sub-theme 3 fill independence in the content of the Civics lesson for performance students to create group slogans to be pasted on display media. In sub-theme 1, national events during the colonial period on the content of Indonesian subjects, students make essay assignments and collect them in the portfolio folder at the back of the class. In theme 7 of project-based activities students make poster images from the colonial period to the independence period. The results are pasted in front of the class in order to make a flipchart." (W, GrA, 3)	"The activities that I have seen are performances, portfolios, and projects. Show off your work by creating slogans posted behind the class. Student portfolios create essays and are archived in a portfolio folder. Project activities by making poster images and making flipcharts." (W,KS,3)
Constraints that occur in learning activities.	"The obstacles faced are in preparing time, costs, materials and equipment. (W, GrA, 3)	"There's a lot to prepare for." (W,KS,3)

Table 9: Results of interviews for life skills learning activities after the Covid-19 pandemic

Indicator	Classroom Teacher of 5th A grade	Head Master of Elementary School
The academic development of students' skills during the face-to-face period is limited to the Even Semester 2021/2022.	"At the beginning of the limited face-to-face meeting for the 2021/2022 Even Semester, the students seemed enthusiastic about participating in the lesson. Judging from the process and learning outcomes, the development of academic skills is indeed less than optimal during the online learning period. Now in this limited face-to-face period, students have motivation from the learning process and learning outcomes are higher than the minimum criteria." (W, GrB, 3)	"It does affect the value between face-to-face and online learning. We can see this from the students' daily and task scores after face-to-face learning tend to be above the minimum criteria. Judging from the process students can absorb material optimally than online learning." (W, KS, 3)
The development of social skills of students during the face-to-face period is limited to the Even Semester of 2021/2022.	"Social skills after face-to-face learning, students' social interactions with the environment are going well. Communication with friends and teachers is warmer." (W,GrB, 3)	Social interaction with friends is more common. Can play together. Communication can focus more on online learning." (W, KS, 3)
The development of student vocational skills during the face-to-face period is limited to the Even Semester 2021/2022.	"Vocational skills in the form of performance and projects tend to be difficult with online learning. In this face-to-face meeting, students are more able to make products and works individually or in groups." (W,GrB, 3)	"Now at this face-to-face, students are more able to make works and products. The students' work is displayed in front of the class. (W,GrB, 3)

Based on the triangulation of sources and techniques, it can be concluded that the research findings regarding the description of learning activities that use learning media to develop vocational skills are: (a) performance activities in theme 7 sub-theme 3 fill in independence in the PPKn lesson content. to the display media. In sub-theme 1, national events during the colonial period on Indonesian language content, students make essay assignments and collect them in the portfolio folder at the back of the class. In theme 7 of project-based activities students make poster images from the colonial period to the independence period. The results are pasted in front of the class in order to make a flipchart. (b) the obstacles faced are that there are many things that must be prepared such as time, material and equipment costs.

22 Life skills after the Covid-19 Pandemic

At 22's stage the researcher presents data on the development of life skills after the Covid-19 pandemic. This data was taken during a limited face-to-face period in the Even Semester 2021/2022. The following is a description of the learning activities.

Based on triangulation of sources, it can be concluded that the research findings regarding the development of lanak life skills after the Covid-19 pandemic are: (a) 13's students' academic skills tend to increase more in terms of the motivation of the learning process and the value of learning outcomes, (b) students' social skills can be seen from social interactions. with a closer environment and communication between students and teachers often occurs, (c) students' vocational skills are more often in performance activities, portfolios or projects so that they are skilled at making work.

27 DISCUSSION

The selection of learning media to develop teacher's life skills already has visual types of learning media in the form of pictures, flannel boards, specimens, audio visuals, folding paper and photographs. Student life skills developed through learning media are limited to knowledge competence. The selection of learning media is done by the teacher by analyzing the needs, competencies and content of life skills. This is in line with the statement of Lehl, Evangelou and Sammons (2020) is that in the selection of learning media, we look at the basic competencies, environment and characteristics of students.

Activities that use learning media to develop academic skills are in the form of group discussion and experiments. The type of media used in group discussion learning activities is in the form of learning videos. In experimental learning activities in the form of specimens, visual media and motion. This is supported by Ghraibel (2012), the use of learning media can foster logical-mathematical intelligence. Logical-mathematical intelligence includes academic skills in processing numbers, mathematics, logic to find and understand various patterns.

Description of learning activities that use learning media to develop academic skills such as group discussions and experiments. Group discussion activities, namely, first, students divide groups with teacher guidance. The two students watched the learning video in front of the class. The three students discussed according to the questions in the video. The four group representatives presented the results of group discussions in front of the class and other groups responded. The five students concluded the results of group discussions with the guidance of the teacher. The obstacles faced are only controlled by active students. Experimental activities, namely, first, students prepare equipment and materials according to the material. Both students saw the stages of implementation in the image media provided by the teacher. The three experiments were carried out under the guidance of the teacher. The four students presented the results of the experiment in front of the class. The five students concluded with the guidance of the teacher. The problem is that it takes a long time to prepare materials and tools.

In addition, activities that use learning media to develop 48's skills in learning activities carried out by teachers use problem-based learning models. The type of media used in the problem-based learning model is a pair of card media. Social interaction and communication occur when the use of pair card learning media between students and students and students and teachers. Social skills activities for elementary school children include basic communication skills, optimism, habits, friendliness, independence, big and positive thinking and a noble personality. This is in line with the opinion of Cronin *et al.* (2020) which states that elementary school children should be trained in social interaction and environmental communication to cultivate social skills.

Description of learning activities that use learning media to develop social skills such as problem-based learning models. The activity of the problem-based learning model is that the students first observe the problems that are in front of the class. The two students divided the groups according to their respective problems. The three students analyzed and presented alternative solutions to problems on paper in the form of cards. The four students paired the solutions in front of the class with the guidance of the teacher. The involvement of the pair card learning media through the problem-based learning model increases student interaction so that students are more communicative. Student interaction with teachers is a collaborative activity in sharing learning experiences (Angraini, Ambarika, and Rai 2020). Obstacles that occur in these learning activities are that some students seem less enthusiastic in solving problems and teachers tend to have difficulty in classroom management.

In other activities, the use of learning media to develop vocational skills in the form of performance, portfolios and projects. The media used by the teacher are display media,

portfolio maps and flipcharts. The selection of learning media and learning activities in vocational skills adjusts the basic competencies that require skill competencies. The basic competencies that require skills refer to the psychomotor taxonomy. Psychomotor taxonomy consists of observing, questioning, experimenting, associating, and communicating (Leslie Owen Wilson 2016).

Description of learning activities that use learning media to develop vocational skills such as performance, portfolios, and projects. Performance activities in theme 7 sub-theme 3 fill independence in the content of the Civics lesson for performance students to create group slogans to be pasted on display media. In sub-theme 1, national events during the colonial period on Indonesian language content, students make essay assignments and collect them in the portfolio folder at the back of the class. In theme 7 of project-based activities students make poster images from the colonial period to the independence period. The results are pasted in front of the class in order to make a flipchart. The impact of vocational skill activities is that students are more skilled in making complete and correct products or works according to the criteria for the assessment indicators. This is in line with the definition of vocational skills conveyed by Otchia and Yamada (2021) the ability to perform problem solving methods, use simple tools and the ability to read instructions. The obstacle faced is that there are many things that must be prepared such as time, material and equipment costs.

During the Covid-19 pandemic, learning activities only use online media to support the implementation of learning in elementary schools. There are many impacts of online learning, including the development of life skills. According to Adedoyin and Soykan (2020), student skills have changed with online learning activities. In the implementation of the Even Semester of the 2021/2022 Academic Year, limited face-to-face learning has begun so that learning is carried out offline. The academic development of children's skills after the Covid-19 pandemic period tends to increase students more, seen from the motivation of the learning process and the value of learning outcomes. The development of social skills of students can be seen from social interaction with the environment more closely and communication between students and teachers often occurs. The development of vocational skills of students during this face-to-face period is more able to create works with performance, portfolios or projects. This is supported by the statement of Kumar Mallineni, Chandra Bhumireddy and Nuvvula (2021) who reported that after the Covid-19 pandemic, learning was more interactive and there was more communication between students, teachers and parents.

CONCLUSION

The purpose of this research, in general, is to analyse the use of learning media to develop students' life skills in fifth-grade

learning in elementary schools after the Covid-19 pandemic. The selection of learning media to develop life skills are: (a) teachers already have visual types of learning media in the form of pictures, flannel boards, specimens, folding paper and photographs, (b) student life skills developed through learning media are limited to knowledge competencies, namely academic skills, (c) constraints in the selection of learning media experienced by teachers in media analysis and needs analysis regarding the content of students' life skills. Analysis and description of learning activities that utilize learning media that can improve students' life skills are classified into academic skills, social skills, and vocational skills. After the Covid-19 pandemic, children's life skills are developed in the following ways: (a) academic skills, where students increase their motivation for the learning process and value learning outcomes; (b) social skills, where students' social interactions with their environment become more intimate, and communication between students and teachers becomes more frequent; and (c) vocational skills, where students more often participate in performance activities, portfolios, or projects, where their motivation is increased for the learning process the value of learning outcomes. This study describes how the use of learning media and changes in students' life skills. This study also identifies how students' life skills change after the Covid-19 period. This research is limited to thematic learning in fifth-grade of elementary school and only focuses on one private elementary school in Probolinggo Regency, East Java, Indonesia. For this reason, it is very possible for further relevant research to be carried out on learning the field of study for other classes and more schools

Acknowledgment

Acknowledgments to the Directorate of Research, Technology and Community Service, Ministry of Education and Culture of the Republic of Indonesia for funding the applied research scheme for the 2022 funding year. We like to express our gratitude to Universitas Nahdlatul Ulama Surabaya for assisting in the completion of this manuscript. We also express our gratitude for the willingness of all research participants to provide valuable information. We would also want to thank the anonymous reviewers for their constructive criticism and insightful remarks.

REFERENCES

- Adedoyin, Olasile Babatunde, and Emrah Soykan. 2020. "Covid-19 Pandemic and Online Learning: The Challenges and Opportunities." *Interactive Learning Environments* 0(0): 1-13.
- Aka, Kuku Andri. 2017. "Pemanfaatan Teknologi Informasi Dan Komunikasi (TIK) Sebagai Wujud Inovasi Sumber Belajar Di Sekolah Dasar." 1: 28-37.
- Akkuzu, Nalan, and Husamettin Akçay. 2011. "The Design of a Learning Environment Based on the Theory of Multiple

- Intelligence and the Study Its Effectiveness on the Achievements, Attitudes and Retention of Students. *Procedia Computer Science* 3: 1003–8.
- Anggraini, Novita Ana, Rahmania Ambarika, and Ramesh Prasath Rai. 2020. "Effect of Providing Basic Life Support for Improving Skills in First Aid on Cardiac Arrest for Student of Senior High School in Kediri." *Enfermeria Clinica* 30(2019): 50–54.
- Atkins, Rose, Alex James Turner, Tarani Chandola, and Matt Sutton. 2020. "Going beyond the Mean in Examining Relationships of Adolescent Non-Cognitive Skills with Health-Related Quality of Life and Biomarkers in Later-Life." *Economics and Human Biology* 39: 100923.
- Bogdan, R. C & Biklen, S. K. 1982. *Qualitative Research for Education: An Introduction Theory Methods*. Boston: Allyn and Bacon, inc.
- Bygstad, Bendik, Egil Øvrelid, Sten Ludvigsen, and Morten Dæhlen. 2022. "From Dual Digitalization to Digital Learning Space: Exploring the Digital Transformation of Higher Education." *Computers and Education* 182(January).
- Chachil, Ketty, Adeline Engkamat, Adib Sarkawi, and Awang Rozaime Awang Shuib. 2015. "Interactive Multimedia-Based Mobile Application for Learning Iban Language (I-MMAPS for Learning Iban Language)." *Procedia - Social and Behavioral Sciences* 167: 267–73.
- Chia, Michael Yong Hwa, Lee Yong Tay, and Terence Buan Kiong Chua. 2019. "The Development of an Online Surveillance of Digital Media Use in Early Childhood Questionnaire-SMALLQTM- For Singapore." *Montenegrin Journal of Sports Science and Medicine* 8(2): 77–80.
- Cohen, L., Manion, L., & Morrison, K. 2000. *Research Methods in Education*. London: Routledge Falmer.
- Creswell, WJ. 2012. *Educational Research: Plannig, Conducting and Evaluating Quantitative and Qualitative Research (4th Ed.)*. NJ: Pearson Education, Inc.
- Cronin, Lorcan et al. 2020. "Life Skills Development in Physical Education: A Self-Determination Theory-Based Investigation across the School Term." *Psychology of Sport and Exercise* 49(May): 101711.
- Doyle, W. 1997. "Heard Any Really Good Stories Lately? A Critique of the Critics of Narrative in Educational Research." *Teaching and Teacher Education* 13(1): 93–99.
- Gan, Benjamin, Thomas Menkhoff, and Richard Smith. 2015. "Enhancing Students' Learning Process through Interactive Digital Media: New Opportunities for Collaborative Learning." *Computers in Human Behavior* 51: 652–63.
- Ghraibel, A. M. A. 2012. "Brain Based Learning and Its Relation with Multiple Intelligences." *International Journal of Psychological Studies* 4(1).
- Grogan, Kathryn E., Christopher C. Henrich, and Mariya V. Malikina. 2014. "Student Engagement in After-School Programs, Academic Skills, and Social Competence among Elementary School Students." *Child Development Research* 2014: 1–9.
- Hacisalihoglu, G et al. 2020. "Enhancing Undergraduate Student Success in Stem Fields through Growth-Mindset and Grit." *Education Sciences* 10(10): 1–11. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85092670197&doi=10.3390%2Feducsci10100279&partnerID=40&md5=335bf69c5f9b7890eb954e121b726b86>.
- Huber, Brittany, Kate Highfield, and Jordy Kaufman. 2018. "Detailing the Digital Experience: Parent Reports of Children's Media Use in the Home Learning Environment." *British Journal of Educational Technology* 49(5): 821–33.
- Humienny, Zbigniew, and Marcin Berta. 2018. "Interactive Multimedia Learning Environment for Geometrical Specification Indication and Verification Rules." *Procedia CIRP* 75: 161–66.
- Isaacs, Barbara. 2018. *Understanding the Montessori Approach: Early Years Education in Practice*. Routledge.
- Jaya, H, S Haryoko, and S Suhaeb. 2018. "Life Skills Education for Children with Special Needs in Order to Facilitate Vocational Skills." In *Journal of Physics: Conference Series*, Department of Electronics Education Engineering, Universitas Negeri Makassar, Makassar, 90222, Indonesia: Institute of Physics Publishing. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85048862821&doi=10.1088%2F1742-6596%2F1028%2F1%2F012078&partnerID=40&md5=c48482b2e35bc20c6471ae5bfa634cf>.
- Kereri, J. O; Kennedy, G. M. & Kereri, D. (2022). Covid-19 and transition to distance learning: perspectives of postsecondary teachers in Kenya/ *International Journal of*, 2(2), 119–137.
- Khan, Fazzlijan Mohamed Adnan, and Mona Masood. 2015. "The Effectiveness of an Interactive Multimedia Courseware with Cooperative Mastery Approach in Enhancing Higher Order Thinking Skills in Learning Cellular Respiration." *Procedia - Social and Behavioral Sciences* 176: 977–84.
- Kim, J. 2021. "An Analysis of Uganda's Vocational Education: Assessing Human Capital and Human Development Approaches." *Issues in Educational Research* 31(2): 556–73. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85109271684&partnerID=40&md5=13dca60c9e5c8af91b9693be79f86dd8>.
- Kumar Mallineni, Sreekanth, Jaya Chandra Bhumireddy, and Sivakumar Nuvvula. 2021. "Dentistry for Children during and Post COVID-19 Pandemic Outbreak." *Children and Youth Services Review* 120.
- Lehr, Simone, Maria Evangelou, and Pam Sammons. 2020. "The Home Learning Environment and Its Role in Shaping Children's Educational Development." *School Effectiveness and School Improvement* 31(1): 1–6.
- Leslie Owen Wilson. 2016. "Anderson and Krathwohl – Bloom's Taxonomy Revised URL." *The Second Principle*: 1–8.
- Lesser, Andrew J. 2020. "An Investigation of Digital Game-Based Learning Software in the Elementary General Music Classroom." *Journal of Sound and Music in Games* 1(2): 1–24.
- Merriam, SB, & Tisdell, EJ. 2015. *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.
- Miles, MB, and AM Huberman. 2014. "Miles and Huberman." *Qualitative Data Analysis: An expanded sourcebook*.
- Moniaga, Jurike V., Margaretha Ohyver, Jeremy Siregar, and Philip Hektato Yauwito. 2019. "Map-Type Modelling and Analysis of Children Stunting Case Data in Indonesia with Interactive Multimedia Method." *Procedia Computer Science* 157: 530–36.
- Norman, Elisabeth, and Bjarte Furnes. 2016. "The Relationship between Metacognitive Experiences and Learning: Is There a Difference between Digital and Non-Digital Study Media?" *Computers in Human Behavior* 54: 301–9.

- Nugraheni, Ika Afifah. 2021. "Implementation of Environmental Care Character for Elementary School Students through Vertical Cultural Techniques." *Jurnal Pengabdian dan Pemberdayaan Masyarakat Indonesia* 1(2): 59–66.
- Otchia, Christian S., and S. Yamada. 2021. "Interactions between Vocational and Attitudinal Skills in Labour Market Outcomes: Findings from the Skills' Assessment of Garment Factory Workers in Ethiopia." *Journal of Vocational Education and Training* 73(1): 24–46.
- Patton, MQ. 2002. *Qualitative Research and Evaluation Methods*. Thousand Oaks: CA: Sage.
- Prawanti, Lia Titi, and Woro Sumarni. 2020. "Kendala Pembelajaran Daring Selama Pandemi Covid-19." In *Prosiding Seminar Nasional Pascasarjana UNNES*, 286–91.
- Puspitasari, W, K Ummah, and A F Pambudy. 2013. "KIDEA: An Innovative Computer Technology to Improve Skills in Children with Intellectual Disability Using Kinect Sensor." In *IEEE International Conference on Industrial Engineering and Engineering Management*, Department of Information System, Telkom University, Bandung, Indonesia: IEEE Computer Society, 1097–1101. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84914133356&doi=10.1109%2FIEEM.2013.6962580&partnerID=40&md5=aa52a3be4840f48af3ce986316e96dd3>.
- Ritonga, A W, M Ritonga, and V W Septiana. 2021. "Crossword Puzzle as a Learning Media during the Covid-19 Pandemic: HOTS, MOTS or LOTS?" In *Journal of Physics: Conference Series*, eds. Rahim R. et al. Thursina International Islamic Boarding School, Malang, Indonesia: IOP Publishing Ltd. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114959244&doi=10.1088%2F1742-6596%2F1933%2F1%2F012126&partnerID=40&md5=149a5712726153f4e648ba60cabca926>.
- Rulyansah, Afib, and Ludfi Arya Wardana. 2020. "Pengembangan Perangkat Pembelajaran Matematika Berbasis Kompetensi 4K Anies Baswedan Dan Multiple Intelligences." *Jurnal Basicedu* 4(4): 1236–45.
- Sarah, Eva, Niscaya Hia, and Roberto Roy Purba. 2022. "The Socialization of Student's Communication with Teachers at Agia Sophia High School Medan." *Jurnal Pengabdian dan Pemberdayaan Masyarakat Indonesia* 2(2): 67–73.
- Umamah, N, R A Surya, and E Muffida. 2021. "Teachers' Ability Analysis of Developing Innovative Instructional Design." In *IOP Conference Series: Earth and Environmental Science*, ed. Sumardi null. History Education, University of Jember, Kalimantan Street 37, Jember, Indonesia: IOP Publishing Ltd. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85106591080&doi=10.1088%2F1755-1315%2F747%2F1%2F012070&partnerID=40&md5=fc4d706def715b61dd7c01cbc07ab143>.
- UNICEF. 2019. *Comprehensive Life Skills Framework*. New Delhi: UNICEF India Country Office. <https://www.unicef.org/india/media/2571/file/Comprehensive-lifeskillsframework.pdf>.
- Wahyuni, Dewi Sri, and Hasan Zainnuri. 2017. "Boosting Students' Life Skill through IT Based Project Learning." *Advances in Social Science, Education and Humanities Research (ASSEHR)* 158: 319–28.
- Wardana, Ludfi Arya, and Uswatun Hasanah. 2019. "Panduan Desain Kelas Tematik Berorientasi Multiple Intelegences Di Sekolah Dasar." *Jurnal Pendidikan: Teori, Penelitian, & Pengembangan* 5(4): 447–53.
- Wijayanti, Redhita Putri, Putu Wuri Handayani, and Fatimah Azzahro. 2021. "Intention to Seek Health Information on Social Media in Indonesia." *Procedia Computer Science* 197(2021): 118–25.
- Wurdinger, Scott, Ron Newell, and En Sun Kim. 2020. "Measuring Life Skills, Hope, and Academic Growth at Project-Based Learning Schools." *Improving Schools* 23(3): 264–76. <https://doi.org/10.1177/1365480220901968>.
- Yoyon, Efendi, Imardi Syahrul, Muzawi Rometdo, and Syaifullah Muhammad. 2021. "Application of RFID Internet of Things for School Empowerment towards Smart School." *Jurnal Pengabdian dan Pemberdayaan Masyarakat Indonesia* 1(2).
- Zhang, Zhixin et al. 2020. "Effects of E-Learning Environment Use on Visual Function of Elementary and Middle School Students: A Two-Year Assessment—Experience from China." *International Journal of Environmental Research and Public Health* 17(5).

Integration of Digital and Non-digital Learning Media to Advance Life Skills of Elementary Education Students Post Pandemic Covid-19

ORIGINALITY REPORT

13%

SIMILARITY INDEX

9%

INTERNET SOURCES

7%

PUBLICATIONS

3%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universitas Negeri Malang Student Paper	2%
2	Krisna Raditya Pratama, Sri Yamtinah, Roemintoyo Roemintoyo. "Students' View of Using Mobile Based Interactive Multimedia with Contextual Teaching and Learning Approach in Chemistry Learning", ICLIQE 2021: Proceeding of The 5th International Conference on Learning Innovation and Quality Education, 2021 Publication	1%
3	journal2.um.ac.id Internet Source	1%
4	www.researchgate.net Internet Source	1%
5	www.iier.org.au Internet Source	1%

6	A D Puspitasari, Suratno, Yushardi. "Analysis the development of sprider learning models to improve student's critical thinking skills in natural science learning junior high school", <i>Journal of Physics: Conference Series</i> , 2021 Publication	1 %
7	repository.unpkediri.ac.id Internet Source	<1 %
8	files.eric.ed.gov Internet Source	<1 %
9	mail.pegegog.net Internet Source	<1 %
10	Hendra Jaya, Sapto Haryoko, Saharuddin, Sutarsi Suhaeb, Sabran, Mantasia. "Life Skills Education for Children with Special Needs in order to Facilitate Vocational Skills", <i>Journal of Physics: Conference Series</i> , 2018 Publication	<1 %
11	www.igi-global.com Internet Source	<1 %
12	Dwi Ardi Meylana, Pratiwi Pujiastuti, Kus Eddy Sartono. "A preliminary analysis study of the mathematics learning needs assessment", AIP Publishing, 2018 Publication	<1 %
13	lib.um.ac.id Internet Source	

<1 %

14

www.infona.pl

Internet Source

<1 %

15

media.neliti.com

Internet Source

<1 %

16

Rossy Arlinda, Wuri Wuryandani, Ali Mustadi. "The Effect of Limited Face-to-Face Learning in New Normal Era towards Learning Motivation of Elementary School Students", AL-ISHLAH: Jurnal Pendidikan, 2022

Publication

<1 %

17

www.manisteenews.com

Internet Source

<1 %

18

www.scribd.com

Internet Source

<1 %

19

journal.perbanas.ac.id

Internet Source

<1 %

20

shareok.org

Internet Source

<1 %

21

ukinstitute.org

Internet Source

<1 %

22

D S Nusantara, Zulkardi, R I I Putri. "Designing PISA-like mathematics problem in covid-19"

<1 %

pandemic (PISAComat)", Journal of Physics:
Conference Series, 2020

Publication

23

K A Aka. "Integration Borg & Gall (1983) and Lee & Owen (2004) models as an alternative model of design-based research of interactive multimedia in elementary school", Journal of Physics: Conference Series, 2019

Publication

<1 %

24

Submitted to Middlesex University

Student Paper

<1 %

25

Lee Yong Tay, Thaslim Begum Aiyooob, Terence Buan Kiong Chua, Kalaivani Ramachandran, Michael Yong Hwa Chia. "Pre-schoolers' use of technology and digital media in Singapore: entertainment indulgence and/or learning engagement?", Educational Media International, 2021

Publication

<1 %

26

silo.pub

Internet Source

<1 %

27

www.pubmedcentral.nih.gov

Internet Source

<1 %

28

www.windowofworld.com

Internet Source

<1 %

29

ir.unimas.my

Internet Source

<1 %

30	lucris.lub.lu.se Internet Source	<1 %
31	online.ucpress.edu Internet Source	<1 %
32	Ilene B. Harris. "Chapter 3 Qualitative Methods", Springer Science and Business Media LLC, 2002 Publication	<1 %
33	ijeais.org Internet Source	<1 %
34	methodnew.com Internet Source	<1 %
35	researchcommons.waikato.ac.nz Internet Source	<1 %
36	"Recent Advances on Soft Computing and Data Mining", Springer Science and Business Media LLC, 2017 Publication	<1 %
37	Gülcan Öztürk, Feyza Şahin. "Parents' awareness of the conscious use of applications on smart devices: A scale development study", Research Square Platform LLC, 2022 Publication	<1 %
38	Muhammad Ilham, Aisyah Mu'min, Raehang Raehang, Nurwasiah Nurwasiah. "The	<1 %

Challenges of Online Thematic Learning in Elementary Schools During the Covid-19 Pandemic", KnE Social Sciences, 2022

Publication

39

Sarah Azhari Pohan, Rahayu Condro Murti. "Analysis of Factors Affecting Student Interest in Studying in a Pandemic Period in Basic Social Sciences Elementary School Concepts", AL-ISHLAH: Jurnal Pendidikan, 2022

Publication

<1 %

40

core.ac.uk

Internet Source

<1 %

41

ejournal.undiksha.ac.id

Internet Source

<1 %

42

eppi.ioe.ac.uk

Internet Source

<1 %

43

journal.unnes.ac.id

Internet Source

<1 %

44

lib.unnes.ac.id

Internet Source

<1 %

45

research.ou.nl

Internet Source

<1 %

46

www.conftool.pro

Internet Source

<1 %

47

www.thefreelibrary.com

Internet Source

<1 %

48

"Encyclopedia of the Sciences of Learning",
Springer Nature, 2012

Publication

<1 %

49

Apri Wardana Ritonga, Mahyudin Ritonga, Vini
Wela Septiana, Mahmud. "Crossword puzzle
as a learning media during the covid-19
pandemic: HOTS, MOTS or LOTS?", Journal of
Physics: Conference Series, 2021

Publication

<1 %

50

Savin Baden, Maggi, Wilkie, Kay. "EBOOK:
Challenging Research in Problem-based
Learning", EBOOK: Challenging Research in
Problem-based Learning, 2004

Publication

<1 %

Exclude quotes On

Exclude matches < 2 words

Exclude bibliography On