



Practical Instructions with Content Differentiation to Improve Elementary School Students' Science Process Skills

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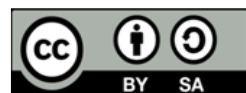
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ABSTRAK

Keterampilan proses sains merupakan kemampuan yang harus dimiliki oleh siswa agar mampu mencapai tujuan pembelajaran melalui pengalaman langsung. Keterampilan proses sains didapat dari pembelajaran IPA secara teori dan praktik. Namun sayangnya kegiatan pembelajaran masih dilakukan dengan metode ceramah dan praktikum yang bisa meningkatkan keterampilan proses sains belum dilakukan secara optimal. Kegiatan praktikum tidak dilengkapi dengan petunjuk praktikum. Petunjuk praktikum yang digunakan di sekolah hanya menggunakan buku guru saja sehingga tidak mengakomodasi semua gaya belajar siswa. Berdasarkan permasalahan tersebut maka tujuan penelitian ini adalah untuk mengembangkan petunjuk praktikum bernuansa diferensiasi konten untuk mempermudah kegiatan praktikum. Petunjuk praktikum bernuansa diferensiasi konten memiliki penjelasan deskriptif dan penjelasan video yang di scan menggunakan QR-Code. Penelitian pengembangan ini menggunakan model pengembangan 4D yang terdiri dari tahapan pendefinisian, perencanaan, pengembangan dan penyebarluasan. Subjek dalam penelitian ini adalah petunjuk praktikum. Metode pengumpulan data menggunakan lembar observasi. Petunjuk praktikum yang telah dibuat telah diuji validitas, kepraktisan, dan efektivitasnya sebelum dapat digunakan di kelas sebagai media penunjang kegiatan praktikum. Hasil uji menunjukkan bahwa petunjuk praktikum bernuansa diferensiasi konten layak dan praktis digunakan saat praktikum. Petunjuk praktikum efektif meningkatkan keterampilan proses sains siswa. Oleh sebab itu, dapat disimpulkan bahwa petunjuk praktikum yang dikembangkan layak, praktis, dan efektif digunakan dalam kegiatan praktikum.

ABSTRACT

Science process skills are abilities that students must have in order to be able to achieve learning goals through direct experience. Science process skills are obtained from theoretical and practical science learning. However, unfortunately learning activities are still carried out using lecture and practice methods which can improve science process skills and have not been carried out optimally. Practical activities are not equipped with practical instructions. The practical instructions used in schools only use the teacher's book so they do not accommodate all students' learning styles. Based on these problems, the aim of this research is to develop practical instructions with nuanced content differentiation to facilitate practical activities. The practical instructions for nuanced content differentiation have descriptive explanations and video explanations that are scanned using a QR-Code. This development research uses a 4D development model which consists of the stages of definition, planning, development and dissemination. The subject of this research is practical instructions. The data collection method uses observation sheets. The practical instructions that have been created have been tested for validity, practicality and effectiveness before they can be used in the classroom as a medium to support practical activities. The test results show that practical instructions with nuanced content differentiation are feasible and practical to use during practice. Practical instructions are effective in improving students' science process skills. Therefore, it can be concluded that the practical instructions developed are feasible, practical and effective for use in practical activities.

1. INTRODUCTION

Science process skills are skills that someone in the 21st century must have, one of which is elementary school students, because 21st century skills are also expressed in science process skills (Senisum, 2021; Yuanita & Yuniarita, 2018). Science learning in Indonesia has not been implemented optimally, thus affecting students' skills and learning outcomes (Satriaman et al., 2018; Margunayasa & Riastini, 2014). According to data from The Trend in International Mathematics and Science Study (TIMSS), in 2015 student learning achievement in mathematics and science among Indonesian students was still relatively low (Suparya et al., 2022; Hadi & Novaliyosi, 2019). The results of the 2011 TIMSS study, Indonesia was ranked 38th out of 42 participating countries with an average score of 386, while the international average score was 500. The latest results, namely TIMSS 2015, Indonesia was ranked 44th out of 49 countries. The average score achieved by Indonesian students is 397 while the international average score is 500. Thus, it is known that learning outcomes in mathematics and science for students in Indonesia can be categorized at a low level (Low Benchmark) (Amaliya & Fathurohman, 2022; Aulia et al., 2020). To optimize science learning in schools, several innovative efforts are needed to create meaningful learning. One effort that can be made is to change the learning process by involving student participation. Changes in the learning process are needed to improve the quality of learning. In accordance with the National Education Goals, there are 3 abilities of graduates according to the level of education, namely, the knowledge (cognitive) aspect including knowledge and competence, the skills (psychomotor) aspect including creativity and the attitude (affective) aspect including faith, piety, noble character, health, independence, and democratic. Currently, learning objectives need to be changed, not just understanding concepts and principles, but students must also have the ability and skills to do something using the concepts and principles they have understood. Students' skills in behaving and behaving like scientists are known as science process skills.

Science process skills are obtained from the learning process, namely in Natural Sciences (IPA) subjects. In science learning, students learn how to find out about natural phenomena around them systematically. Therefore, science is not just mastery of skills, knowledge in the form of facts, concepts and principles but also a process of discovery through experiments in the learning process (Lusidawaty et al., 2020; Nofiana & Julianto, 2017). The ability of science process skills in the science learning process is very important because science process skills can bridge the achievement of science learning goals by providing direct experience through scientific investigations (Suhada, 2017). Science process skills are very necessary to acquire, develop and apply scientific concepts, principles, laws and theories (Yuliati, 2016; Rahmawati et al., 2014). In learning, students are expected to be able to sharpen their mastery of concepts by involving their cognitive skills (Maryani et al., 2019; Marfu'i, 2016). In science learning, students will learn theoretically and also practically. Theoretical learning is obtained through material provided by the teacher, while practical learning is obtained through practical activities. Students who have science process skills will be able to construct and train students' skills and thinking patterns scientifically and systematically in the learning process and daily life (Mahjatia et al., 2021 ; Sudibyo et al., 2018).

In general, students' science process skills are still underdeveloped in schools, because there are still many teaching and learning activities that are teacher-centered. Even though science process skills have an important role for students, it is appropriate that science process skills be trained from an early age. However, unfortunately, there are still several obstacles or problems related to developing students' science process skills. One of them is the problem at SD Negeri 4 Kaliuntu. The results of the interview with the class V homeroom teacher showed that in science learning teachers tend to use the lecture method, learning still uses a teacher centered approach. The teacher explains the material and the students just listen and write the equations made by the teacher. The teacher also stated that in science learning he had only done one practicum. In practical activities the teacher does not use practical instructions but only uses the teacher's book and explains it orally.

Apart from conducting interviews with class V teachers, to determine the level of students' science process skills, an initial test was carried out. The test is carried out by giving five multiple choice questions containing five aspects of science process skills. These five aspects include observing, grouping, proposing hypotheses, using tools and communicating. Only 29.5% of students have good science process skills, but as many as 70.5% of students are still in the poor category. Based on the tests carried out, the skill aspect of using tools is the aspect that students most often answer incorrectly. This is because teachers rarely carry out practicums. Apart from carrying out science process skills tests, the results of interviews with class V homeroom teachers stated that students rarely carry out practicums. Even though practicum activities are very important because they can provide real experience in science learning. In practical activities, students can experiment which can improve students' thinking skills and abilities and provide students with the opportunity to interact directly in concept discovery activities. Practical activities can raise students' learning motivation because students will be interested in trying something new. One of the advantages of

practical learning is that students can practice by trial and error, students can repeat the same activities or actions until they are truly skilled.

Considering that practical activities are very important to improve students' science process skills, it is appropriate that science process skills be trained from practical activities so that students have skills in analyzing problems, working together in finding solutions to problems and skills in using tools when carrying out experiments (Putra et al., 2022; Rahayu, 2020). However, unfortunately, there are still several obstacles related to practical activities in elementary schools. One of them is that there are no practical instructions used during the activity. Practical instructions only use teacher's books which contain purely descriptive explanations and do not accommodate students' learning styles, namely visual, auditory and kinesthetic. This is certainly not effective because students only read written explanations. Students who have an auditory learning style will have difficulty because they cannot hear the explanation of practical work steps. So practical instructions are needed that can accommodate all students' learning styles so that practical activities can run smoothly, so that learning objectives can be achieved.

The effectiveness of using practical instructions to improve science process skills can be seen from several studies that have been conducted. One of them was carried out by Goddess (2019) who developed a science practicum guidebook based on process skills, found that the guidebook could improve students' science process skills and influence student learning outcomes. In line with the statement Rajagukguk (2016) which revealed that practical instructions are needed during practical activities because apart from providing work steps, practical instructions can also help students understand the concept of material. Considering that practical instructions are very important to use, it is appropriate for teachers to provide instructional media in this case practical instructions, that are interesting and can accommodate all students' learning styles, which are visual, auditory and kinesthetic learning styles (Setiawati et al., 2021; Pusporini et al., 2014). One effort that can be made to accommodate all students' learning styles in understanding practical instructions is to use content-differentiated practical instructions (Rohimat et al., 2023; Latifah, 2023).

Currently, differentiated learning really needs to be done, especially in learning that uses the Independent Curriculum. The Independent Curriculum demands that educational units create curricula that are adapted to the characteristics of schools and the needs of different teaching units (Cholilah et al., 2023; Gusteti & Neviyarni, 2022). This curriculum also requires the teacher's role to implement different learning. However, educational units have not created a curriculum that can truly be adapted to the needs of students at their institution. Every child has different interests, skills and learning preferences. Therefore, various means are needed to enable them to understand skills and lessons according to the particularities and individuality of each student (Evendi et al., 2023; Herwina, 2021), so teaching methods must take into account the unique qualities and differences of each student so that they can develop optimally. Differentiated learning is divided into four aspects, namely differentiation of content, process, product, and environment or learning environment in the classroom (Insani & Munandar, 2023; Rafiska & Susanti, 2023). One of the differentiations that can be carried out in science learning, especially in practical activities, is content differentiation, namely by using content differentiated practical instructions.

Content differentiation in practical instructions relates to how teachers provide variations in the delivery of practical work steps by considering the mapping/classification of learning needs in terms of learning styles and student interests (Purwanto & Gita, 2023). Students who have a visual learning style can understand practical instructions just by reading and understanding the work steps because they learn by seeing things, while students who have an auditory learning style need explanations in audio or video form to visualize the words in the instructions so that students understand the meaning, because they learn by listening to things. explained in the practical guide (Putri et al., 2020; Indriyana et al., 2019). Content-differentiated practical instructions are practical instructions that combine work step instructions in the form of descriptions with work step instructions using videos. This integration can be done by creating practical instructions which contain a QR-Code containing a video of the practical work steps, so that after students read the description of the work steps next to it there will be a QR-Code. Students who do not understand the explanation can scan the QR-Code so that a video will appear containing images and sounds when practicing work steps according to the description of the practical instructions.

Unfortunately, the results of research on the development of practicum instructions mostly lead to the development of conventional practicum instructions which are more oriented towards work steps alone. The results of the study from the research read were limited to the development of practical instructions which were still book-based without any content differentiation. The novelty of this research is developing practical instructions with nuanced content differentiation that are developed according to students' learning needs in the field and the development of the 21st century learning process in the form of using QR-Code which contains videos of materials, tools and materials as well as explanations of work steps to improve students' science process skills. For this reason, the aim of this research is to develop content-

differentiated practicum instructions to accommodate students' learning styles so as to improve students' science process skills.

2. METHOD

This research is a research and development study using a 4D model. The 4D model consists of four stages, namely Define, Design, Development, Disseminate (Muqdamien et al., 2021; Tegeh & Kirna, 2010). Development research is research that aims to develop and validate a product that will be used in education (Hanafi, 2017; Ainin, 2013). These products are not only limited to developing teaching materials, but can also include developing procedures and learning processes. Then Full Moon (2013) stated that development research is a type of research that aims to produce a product through several special procedures, namely needs analysis, product development, product evaluation, revision and product distribution. Development research is a study carried out systematically through the design, development and evaluation stages of programs, processes and learning products that must meet the criteria of validity, practicality and effectiveness (Silvia & Mulyani, 2019; Hanafi, 2017).

This method and model were chosen because the implementation stages are short, namely only 4 stages. Apart from that, this model is also very practical and systematic because it contains the steps in developing a product. The first stage is definition, namely carrying out several analyzes such as (1) problem analysis. In this stage the problem analysis carried out includes teacher interviews, field observations, and analyzing the science and science subject module on electrical energy. Problem analysis aims to determine the problems of class V students at SD N 4 Kaliuntu in practical activities such as the learning styles possessed by students (visual, auditory, kinesthetic) (2) competency analysis, carried out by looking at basic competencies (KD), indicators of competency achievement, and learning materials. This aims to ensure that the media developed is in accordance with the demands of the applicable curriculum. (3) analysis of practicum material/topics, with the aim that this development focuses on practicum material for which practicum instructions will be made. The material taken in this practical guide is electrical energy sources. The second stage is planning (design), namely the activities carried out are designing practical instructions developed starting from determining the material, choosing KD and initial design. The design or sketch that has been prepared is then consulted with the supervising teacher to provide input and suggestions. After the design or sketch is approved by the supervising teacher, it continues with the media creation stage. The third stage, namely development, activities carried out were conducting judges' tests to determine the validity of research instruments and media validation tests by experts. Media that has been created at the design stage is subjected to expert testing. Expert testing activities were carried out by 4 experts. The results of the assessments from experts are then analyzed to determine the validity of the media that has been developed, and to make improvements if there are input and suggestions. The final stage is dissemination, namely handing over the product to schools.

The subject of this development research is practical instructions. Meanwhile, the object of this development research is the validity and effectiveness of practical instruction media aimed at 34 fifth grade students. The trial was carried out using a pre-experiment design, one group pretest-posttest. In a pre-experimental design, one group pretest-posttest, the dependent variable will be measured before being given treatment and after being given treatment (Ismalia et al., 2023; Aswitami, 2017). The aim of the trial was to determine the effectiveness of content-differentiated practical instructions on the science process skills of fifth grade students. In the pre-experimental design, one group pretest-posttest, only involving one group in the treatment. The data collection method and effectiveness use an observation sheet which contains several statements that have been made. The instrument grid used is presented in Table 1, Table 2, Table 3 and Table 4.

Table 1. Material Expert Instrument Grid

No	Component	Indicator
1	Objective	a. Conformity of material descriptions with learning outcomes b. Suitability of learning objectives with learning materials
2	Fill	c. Suitability of activities with learning material
3	Language	d. Suitability of the language used with the characteristics of students e. Use of language that is effective, efficient and easy to understand f. Accuracy of spelling in practical instructions
4	Relevance	g. There is coherence between the practicum objectives and the material presentation h. The practical guidance material presented is accurate and contextual

Table 2. Media Expert Instrument Grid

No	Component	Indicator
1	Cover view	a. Cover appeal
2	Content display	b. Composition or layout of writing.
		c. Suitability of placement of each component.
3	Content	d. Suitability of letters, spacing and layout of writing.
		e. Descriptive explanations are easy to understand.
		f. The QR-Code on the practical instructions is easy to scan
		g. The video explaining the work steps is clear and easy to understand
		h. Ease of use of practical instructions

Table 3. Practical Instrument Grid (Student Response)

No	Aspect	Indicator
1	Product use	a. Ease of use of practical instructions
2	Complete the practical instructions	b. Conformity of the contents of the practical instructions with the learning material
3	Visual Communication	c. Display and operation

Table 4. Effectiveness Test Instrument Grid

No	Dimensions	Indicator
1	Formulate a Hypothesis	a Students are able to express what happened before carrying out the experiment based on patterns or relationships of information and the results of observations made
2	Using tools and materials	b Use tools and materials that are appropriate for practical activities and use them appropriately
3	Conduct experiments	c Students know the working steps of the experiments carried out
4	Communicate	d Write down and present the results of the experiments carried out
5	Conclude	e Formulate conclusions relevant to the results of the experiments carried out

The content validity of the material, media and practicality expert instruments has been tested by two experts (judges). Analysis of the content validity of the questionnaire instrument was tested using the Gregory formula. Meanwhile, the product effectiveness instrument was assessed by 4 experts (judges) using the CVR/CVI formula. After the instrument is suitable for use for data collection, the data that has been obtained is analyzed descriptively qualitatively and descriptively quantitatively. Qualitative data was obtained from reviews by experts. Meanwhile, quantitative data was obtained from the rating scale resulting from expert test validation, the practicality rating scale by teachers and students, and effectiveness test data (Restina et al., 2021; Nashruddin & Roslina, 2019).

3. RESULT AND DISCUSSION

Result

This research produces practicum instruction media with nuanced content differentiation containing several components ranging from pre-content to content. This research went through 4 stages, namely define, design, develop and disseminate. The first stage is define (definition) which is carried out by conducting interviews, observations, learning style analysis and science process skills tests for class V students. At this stage the results are obtained that science learning, especially in the science field, still carries out learning conventionally, namely teachers only giving lectures and practical activities are rarely carried out. The results of the science process skills test conducted showed that only 29.5% of students had good science process skills, while as many as 70.5% of students were still in the poor category. Second stage namely design (planning), at this stage the researcher designs the practicum instruction media. There are several components contained in the practical instructions. The contents section contains learning outcomes, indicators, materials, problem orientation, activity objectives, problem formulation, hypothesis, tools and materials, work steps (in the form of videos in QR code), observation tables, analysis of practicum results, conclusions, and developer identity. The media was designed using the Canva application and the video content in the practical instructions was edited using the Cap cut application. Practical instructions for differentiated content were developed in printed form using art paper with a smooth surface so that it

can be used for a long time. The size of the practical instructions is A5 so that students can easily carry them. The practicum instructions contain electrical energy material. The practicum carried out is making a simple electrical circuit. The results of the design of practicum instructions with nuanced content differentiation can be seen in Figure 1.



Figure 1. Design Results of Practical Instructions

Third phase, namely development, at this stage a validity test of the instrument is carried out by experts who are experts in their field. The validity of the instruments tested were material expert, media expert, practicality and effectiveness instruments. Based on the results of the instrument validity test, the material expert instrument, media and practicality were tested using a formula gregory getting a score of 1.00 with very high content qualifications. Test the validity of the effectiveness instrument using the CVR/CVI formula with a result of 1 with very appropriate qualifications. Validation of the suitability of materials and media from practical instructions is carried out by validators who have expertise in their fields. Based on the analysis that has been analyzed by material experts, the validity is 0.91 with high validity criteria. Next, validation of media suitability is carried out by media experts, with improvements to the cover and use of punctuation. The assessment results from media experts obtained a validity of 0.95 with high validity criteria. After validation of the practicum instructions is carried out, the practicality of the practicum instructions nuanced in content differentiation is tested for practicality. The practicality test of the practicum instructions was carried out by three students as respondents who were users of the practicum instructions, namely class V students at SD Negeri 4 Kaliuntu. The assessment results from the three practitioners obtained a percentage of 96% with Very Good criteria.

Fourth stage namely disseminate, this stage involves printing practical instructions with nuanced content differentiation and handing them over to the teacher as a means of carrying out the practicum. The teacher uses these practical instructions and the researcher will carry out an assessment using an observation sheet to determine the effectiveness of the product being developed. The results of the effectiveness test were carried out using the t-test using the SPSS application. The results of normality presented in Table 5, homogeneity in Table 6 and t-test presented Table 7.

Table 5. Normality Test Results

Group	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Pre-Test Result Data	0.187	34	0.004	0.947	34	0.103
Post Test Result Data	0.140	34	0.089	0.963	34	0.288

Table 6. Homogeneity Test Results

Parameters		Levene Statistics	df1	df2	Sig.
Assess Students' Science Process Skills Before and After Implementation	Based on Mean	0.049	1	66	0.825
	Based on Median	0.002	1	66	0.963
	Based on Median and with adjusted df	0.002	1	64.394	0.963
	Based on trimmed mean	0.039	1	66	0.844

Table 7. T-Test Results

Pair		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	PreTest - Post Test	-25.11765	11.14305	1.91102	-29.00564	-21.22965	-13.144	33	0.000

Based on the t-test table, it was found that the significance value (2-tailed) was 0.000. These results show that the significance value is smaller than 0.05 (5% significance level) or $p < 0.05$. This means that H_0 is rejected and H_a is accepted. Based on these results, it can be concluded that the use of content-differentiated practicum instructions is effective in improving the science process skills of fifth grade elementary school students.

Discussion

This research aims to produce practical instructions with nuanced content differentiation for fifth grade elementary school students. This practical instruction is different from other practical instructions because it has not existed before. This practical guide was designed based on the results of a needs analysis in the field. These practical instructions can help solve the problems students are facing. This practical instruction is very suitable for fifth grade students because it is equipped with supporting elements for science process skills as well as practical instructions that accommodate students' learning styles, which have gone through development stages and testing stages, which shows that practical instructions with nuanced content differentiation are suitable for use and effective in improving elementary school students' science process skills.

Several studies also examine the use of practical instructions to improve science process skills. Research conducted [Yuanita & Yuniarita \(2018\)](#) shows that science practicum instructions based on science process skills can improve elementary school students' critical thinking skills, although the improvement in the indicator of providing further explanation is still small, this is because they have not been trained in adding answers in a complex sentence ([Satriaman et al., 2018](#); [Margunayasa & Riastini, 2014](#)). Related research was also carried out by [Royani & Imran \(2020\)](#) stated that the practicum instructions that were made could be understood by students and made it easier for students in the practicum process, so that the online practicum process could be smoother. The resulting practical instructions are declared valid by the validator and suitable for use in the online practical process.

The results of tests carried out on practical instructions starting from validity, practicality and effectiveness tests show that the content and learning steps are in accordance with the characteristics of the students. The learning provided really needs to be adjusted to the characteristics of the students so that learning can be carried out well and effectively. It is very important to understand student characteristics so that teachers can design learning so that appropriate learning outcomes are achieved. Then, fill in the media as a whole, starting from the attractive design used, and the letters, spacing and layout of the writing are appropriate. An attractive design will definitely attract readers' interest ([Satriaman et al., 2018](#); [Margunayasa & Riastini, 2014](#)). Apart from that, appropriateness of letters, spacing and layout is very important so that readers can understand the contents of the practical instructions. Overall The practicum instructions have good qualifications and can be used continuously in implementing practicum activities in elementary schools, especially for class V students, so that the practicum instructions with content differentiation nuances can be disseminated to other classes at SD Negeri 4 Kaliuntu.

Practical activities are really needed in science learning because students can do it directly and prove a phenomenon. Practical activities from a constructivist perspective aim to provide students with scientific knowledge in such a way that they not only understand scientific concepts and principles, but also the significance of science learning. Emphasis on constructivism and hands-on inquiry-oriented learning to promote students' conceptual knowledge by building on prior understanding, active engagement with subject content, and application to real-world situations. A constructivist view that emphasizes discovery, experimentation, and open problems. In practical activities, students can build knowledge and understanding of concepts according to data and facts obtained through experimental activities ([Arsyad & Sartika, 2021](#); [Rismawati et al., 2016](#)). Practical activities have an important role in science education, because they can train students' science process skills ([Purwanto & Gita, 2023](#); [Suryaningsih, 2017](#)).

The results of research on practical instructions that can improve learning outcomes were also carried out by [Maslihak, et al \(2022\)](#) The results show that the validity of the product developed received a

score of 80% in the valid category. The level of product efficiency also achieved high results with a score of 73% in the efficient category. Based on these results, it can be concluded that the science practicum manual can be used in the learning process. Based on several studies, the results show that the practicum instructions created can be understood by students and make it easier for students in the practicum process, so that the online practicum process can be smoother (Yuliati, 2016; Rahmawati et al., 2014). However, of these three studies, there has been no research on the development of content-differentiated practicum instructions. The practical instructions created are still text-oriented and only have descriptive explanations. Elementary school students have different learning styles such as visual, auditory and kinesthetic. So in providing learning teachers must pay attention to each student's learning style.

Therefore, this development research has an element of novelty by presenting practical instructions with differentiated content in the form of using QR-Code which contains videos of materials, tools and materials as well as explanations of work steps to improve students' science process skills. In addition, researchers consider it necessary to develop content-differentiated practicum instructions so that they can be suitable assistants for teachers in implementing practicum activities that can accommodate students' learning styles. This research provides theoretical implications regarding creating media for practical instructions with nuanced content differentiation as an effort to improve the science process skills of elementary school students, and at the same time also has practical implications for the learning process where teachers no longer need to explain repeatedly, students can simply use practical instructions with differentiated content. read and view the videos that are available. The available videos can be played repeatedly until students understand the practical work steps.

4. CONCLUSION

This research produces media to assist teachers in implementing practicum, namely in the form of practicum instructions with nuanced content differentiation. This practicum guide contains descriptive explanations and videos that help students understand the practicum workflow. Based on the results of the research that has been carried out, the suggestions that can be conveyed to related parties are as follows. (1) It is hoped that students will continue to learn better. With this practicum instruction, it is hoped that it will make it easier for students in practicum activities. (2) Teachers are expected to apply learning methods that are fun and balance theoretical learning and practical activities. (3) School principals are expected to provide support for activities that support increasing student potential, as well as activities that can improve the quality of teachers in providing innovative learning. (4) Researchers, if they conduct similar research, are expected to use this research as a reference in developing similar practical instructions on different topics.

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