

# Teacher's Need Assessment: For Digital Media-Aided QR Code Worksheet Workshop to Integrated Social Studies Learning in the New Normal Era

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## ABSTRACT

Face-to-face learning activities began to be considered by the government after 1.5 years of the Covid-19 pandemic. Necessarily, learning activities need to be adapted with the conditions of the new-normal era. Teachers need assistance to face the current learning conditions. This study aimed to assess the teacher's need for workshop materials which could combine printed teaching materials with the digital world. The method used was a survey. The sample was 28 social studies teachers in Sidoarjo at public and private junior high schools. The instruments used were multiple-choice questions and questionnaire with a Likert scale. The data analysis technique used was the percentage. The results showed that the teacher's need for the workshop material was very high. Based on the research results, the social studies teachers need digital media-QR code worksheet workshop for integrated social studies learning.

**Keywords:** *integrated social studies learning, digital media-aided, QR-Code worksheet, need assessment*

## 1. INTRODUCTION

After 1.5 years of Covid-19 entering Indonesia, the government began to consider face-to-face school activities. During the Covid-19 pandemic, schools were conducting online learning. Several studies saying that online learning in Indonesia during the COVID-19 pandemic was not very effective and raised various problems [1]– [4]. Teachers certainly needed to adapt to this dynamic condition, especially related to the learning process. After 1.5 years of adapting to ICT-based learning, they need to continue to develop skills in using ICT for classroom learning. However, they also need to adapt to the student needs in the new normal era as not 100 percent of students attend face-to-face learning.

The integrated approach in social studies is a unique feature of the learning process. In this regard, teachers are expected to have a good understanding of the integrated concept in social studies. An integrated understanding of social studies science is one of the requirements in realizing a professional social studies teacher. A professional teacher is someone who has special skills or abilities to guide and foster students, in terms of intellectual, spiritual, or emotional aspect. The

competences that teachers should possess include pedagogic, professional, personality, and social competences [5].

The factual description of the condition of teacher competences, especially pedagogic and professional competences, is still considered low. It was revealed that almost 75% of teachers did not prepare the learning process well [6]. Teachers tend to prepare learning by prioritizing the materials to be taught instead of the learning objectives. Another fact revealed is that they also tend to teach using a monotonous method, meaning that they do not use creative and interesting learning methods to stimulate students' enthusiasm for learning in the classroom. Another thing also revealed is that they do not tend to use learning objectives as the basis for designing learning strategies, teaching materials, and learning evaluation and assessment tools.

The use of teaching materials is not optimal, in the practice of social studies learning in the classroom and the frequency and optimization of the use of social studies teaching materials is still low [7]. The low teachers' pedagogic and professional competence is caused by the low level of teacher literacy where they are reluctant to update knowledge through reading activities

and participating in scientific activities. The social studies teachers who teach in junior high schools often complain about new policies related to the demands of an interdisciplinary social studies curriculum, where social studies should be taught in an integrated manner in a thematic form. Indirectly, there are demands for social studies teachers, namely that they should be able to teach all four fields of study (economics, history, geography, and sociology) in one integrated social studies subject, even though the teachers come from mono-sciences. This condition is revealed in research that the social studies teachers in Sidoarjo who come from certain mono-sciences have difficulty in delivering and developing teaching materials [8].

Therefore, it is urgent to improve the skills of social studies teachers to develop creative and innovative teaching materials. Currently, education and learning are faced with the phenomenon of the 4.0 Industrial Revolution, where mastery of technology is absolutely necessary. Especially now that we are still in the Covid-19 pandemic and a period of new habits, where all learning takes place online and offline by utilizing digital learning platforms. Therefore, currently in the Industrial Revolution 4.0 and new normal era, teachers should be able to adapt to the very fast and technology-based system dynamics, including compiling digital media-aided teaching materials. One of the teaching materials that can be developed and used for online and offline learning is the QR-Code worksheet.

QR code, which stands for Quick Response code, was first used in the automotive industry to track vehicle components (Salah, Saud, Asnur, 2018). Currently, the use of two-dimensional barcode is very widespread, but generally it is intended to encode website addresses, contact numbers, email addresses, telephone numbers or just plain text. The good Worksheet (LKPD) design is very necessary to achieve learning process that encourages students to play an active role. Based on the research, LKPD not only serves as a guide for students in carrying out learning activities, but also makes it easier for them to achieve learning competencies [9].

Based on the discussion with the high school social studies teacher who represented the Social Studies Working Group (IPS MGMP) in Sidoarjo, it was revealed that the social studies teachers there had difficulties in developing digital-based teaching materials, especially LKPD used to evaluate the achievement of learning competencies. Considering that the teaching and learning process during the pandemic used online learning system, so the teaching materials, including LKPD, used in the learning process were also the digital ones. To adapt to the new normal era and respond to the phenomenon of the 4.0 industrial revolution, the digital media-aided teaching materials are absolutely necessary. This will remain essential during the post-pandemic.

The discussion also revealed that the teachers admitted that they had inadequate skills to develop the digital media-aided worksheets since so far they were accustomed to the printed worksheets purchased from the printing. The obstacles faced by the social studies teachers in junior high school were also identified in developing the teaching materials. First, they lack an understanding of social studies teachers about the importance and function of digital media-aided worksheets to support the social studies learning. Second, they have not had adequate skills in designing and developing the digital media-aided teaching materials (LKPD). Third, social studies teachers in junior high schools are not prepared with workshops on the preparation of the digital media-aided teaching materials (LKPD).

Based on these conditions, it is crucial to conduct research that could provide an assessment of teachers' needs related to the development of pedagogical skills, especially in developing the QR code worksheet and digital media required by the teachers in Sidoarjo. The findings are expected to greatly assist the research team in designing the workshop content for the social studies teachers in Sidoarjo.

## **2. METHOD**

This needs analysis research was conducted using quantitative approach and survey method. The population was all members of the Social Studies Working Group (MGMP IPS) in Sidoarjo with a total of 56 teachers. The sample taken was 50% of the population, namely 28 teachers from 27 public and private junior high schools in Sidoarjo. The data collection technique used was a questionnaire consisting of 15 questions provided online via Google Form. Some of the questions in the questionnaire were related to several things, namely: 1) identity; 2) learning methods, teaching materials, online LMS used; 3) learning media that had been made; 4) needs and knowledge of the content to be provided. The data analysis technique used was the percentage, used to determine the level of content needs at the workshop to be held. First, confirm that you have the correct template for your paper size. This template has been tailored for output on the A4 paper size. If you are using US letter-sized paper, please close this file and download the Microsoft Word, Letter file.

## **3. FINDINGS AND DISCUSSION**

### ***A. Findings***

The respondents who answered questions related to this needs analysis were 28 people. All respondents were spread from all public and private junior high schools in Sidoarjo. The first question asked was related to what

methods they used during online learning. The results can be seen in table 1 below.

**Table 1.** The most frequently used online learning methods

No	Types of Method	Percentage
1	Assignment	46.4
2	Online Meeting	35.7
3	Chatting	7.1
4	Watching Video	3.6
5	Others	7.2

Source: 2021 Survey Results

Table 1 indicates that almost half of the social studies teachers of junior high schools in Sidoarjo give assignments in the online learning. Furthermore, less than half of them conducted online meetings with several platforms such as Google Meet or Zoom. In addition, a few of them use chat and watching videos for online learning with students.

The second question was related to the teaching materials used by the social studies teachers. It was important to ask this question since the workshop would adapt to what teaching materials widely used and required during the face-to-face or online learning process. Table 2 indicates the survey results.

**Table 2.** The widely used teaching materials

No	Types of Teaching Materials	Percentage
1	Printed Book	21.4
2	Worksheet	64.3
3	Learning Video	10.7
4	PowerPoint	3.6

Source: 2021 Survey Results

Table 2 indicates that most social studies teachers used LKPD as the teaching material used by students so far. Meanwhile, less than half of social studies teachers used printed books or textbooks for the social studies learning process. A few others use learning videos as the teaching material. This result would actually really support the workshop focused on using LKPD as the social studies teaching material for junior high schools in Sidoarjo.

Another question was related to the use of most widely used LMS by the social studies teachers in junior high schools in Sidoarjo. The survey results indicate that almost all (92.9%) social studies teachers in Sidoarjo use Google Class as the Learning Management System during this online learning. In addition, the other question was related to the digital video learning media that had been performed.

**Table 3.** The created video media

No	Types of Video Media	Percentage
1	Animated Video	7.4
2	PowerPoint Video+Voice	77.8
3	Video Recording	7.4
4	Other Videos	7.4

Source: 2021 Survey Results

The social studies teachers in Sidoarjo actually had a fairly high effort in developing the social studies learning media in the form of digital video. They had experience in making videos, as shown in Table 3. A small number of them made animated video, video recording, and other videos while most of them used power point and voice to make videos. Moreover, they were asked about what kind of video workshop materials they would like to learn through this workshop that would be designed. The results can be seen in Table 4.

**Table 4.** The required video media workshop materials

No	Types of Learning Media	Percentage
1	Powtoon Animated Video	42.9
2	PPT Video Making with Face Added	46.4
3	Interactive Video	3.6
4	Other Videos	7.4

Source: 2021 Survey Results

Table 4 indicates that less than half of the social studies teachers in Sidoarjo Regency required animation materials with the help of Powtoon as the software. Less than half of them felt the need to create a PPT video with face added. This choice was given since there were still many of them predicted to not know that PowerPoint could make videos by showing the presenter's face while a small number of them needed interactive video and other videos.

The next series of questions in this need assessment was related to the materials needed in the workshop. Several questions were asked related to the workshop such as integrated social studies worksheet based on the main materials in the syllabus. Then, the question was related to the digital media-aided worksheet and digital media creation. The last was the question related to how the material requirements for the workshop were. Table 5 indicates the percentage of the teacher's need for the materials to be trained.

**Table 5.** The level of teacher needs for workshop material

No	Types of Material	Percentage
1	Integrated Social Studies Worksheet	89.28
2	Worksheet with Digital Media	92.85
3	Digital Media	94.28

4	Digital Media-aided QR Code Worksheet	94.28
Level of Need		92.67

Source: 2021 Survey Results

Table 5 indicates the level of needs for the social studies teachers in Sidoarjo for integrated social studies worksheet material was very high. The level of teacher needs for digital media-aided worksheet material was also in the very high category. Meanwhile, the workshop materials related to the practice of digital media or learning videos were also in the very high category. The social studies teachers in Sidoarjo also needed digital media-aided QR Code worksheet, a material very much needed at the time of the workshop. On average, they had a very high level of need for the materials offered in the workshop design.

Subsequently, the teacher's initial knowledge of the QR-Code was very much needed. Thus, several questions were asked to identify their knowledge related to QR-Code. Table 6 indicates the level of teacher knowledge about QR-Code.

**Table 6.** The teacher knowledge about QR-Code

No	Types of Learning Media	Percentage
1	Hearing about QR Code	67,85
2	Understanding QR Code Functions	57,85
3	Utilizing QR Code for Social Studies Learning	45,71

Source: 2021 Survey Results

The Social Studies teachers who hear the term QR-Code are in the fairly high category. Further, those who understand the QR-Code functions are in the fairly low category. Meanwhile, those who used QR-Code are still low. All questions intended to obtain an overview of the social studies learning process and the knowledge of social studies teachers in utilizing digital media had been shown. The results of this needs analysis would be very useful for designing workshop program so it conformed the teachers' needs.

**B. Discussion**

The findings indicate that most of the social studies teachers in Sidoarjo used the method of giving assignments to the students in the learning process at home during the pandemic. Actually, this would not be a problem when they gave structured assignments or provided the teaching materials that were able to guide the students to learn independently to make the learning process at home directed. The findings could be used as a reference that the social studies teachers in Sidoarjo required the teaching materials that facilitated the students as learning guides wherever they were.

The teaching material widely used by the social studies teachers in Sidoarjo was LKPD (worksheet). Nonetheless, the majority of the types of LKPD used by teachers were material summaries and a collection of questions. The ideal LKPD that should be applied in the social studies learning had characteristics as learning guide, richness and variety of media, and challenging activities in the learning process. With these characteristics, the powerful social studies learning (meaningful, integrative, value-based, challenging, active) would be achieved [10].

The social studies teachers in Sidoarjo had also started to adapt to digital learning. It was proven in Table 3 that most of the teachers had tried to make videos made through PowerPoint. With this result, it would actually be easier for the team to develop the teacher's ability to make a video. There were still few teachers experienced in making animated videos, so the workshop in making animated videos was highly considered to be given to them.

The teachers were given the choice to determine what media most needed in the learning process. The majority of them, shown in Table 4, chose animated videos and PowerPoint videos with face added. Both of these media were required by the teachers, so they were highly considered to be given as the workshop materials. Indeed, these ICT-based media would be able to significantly increase motivation and engagement with the students [11] especially when they were made with and displayed the teacher's own face and voice.

The findings presented in Table 5 show the level of teacher needs for the workshop materials offered. In Table 6, it is also known the level of teacher knowledge about QR-Code and its use in the social studies learning is quite low. Based on the findings, it was assessed, formulated, and decided to design the workshop materials according to priorities.

**Table 7.** The workshop material needs assessment

No	Workshop Material	Purpose
1	Quality Maintenance of Social Studies Learning in the New Normal Era	Motivating teachers to maintain the quality of social studies learning in the new normal era
2	Integrated Social Studies Learning through Worksheet	Providing further understanding to teachers to provide integrated social studies learning through worksheet
3	Utilization of QR-Code in Social Studies Learning Worksheet	Introducing QR-Code to teachers to be used in preparing worksheet
4	Powtoon Digital Animation and PPT Video Learning Media Workshop	Providing skills to teachers to create simple animated video/PPT video

5	Preparation and Template of QR-Code Worksheet	Providing skills to teachers to design QR-Code worksheet
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Source: 2021 Needs Analysis Results

The findings were then formulated into materials assessed for the level of needs, to be agreed upon and given at the workshop. Five materials would be provided to the teachers. The first one was the material related to the motivation to improve the quality of learning in the classroom. The second one was the material related to the integrated teaching materials [12], aiming to provide further understanding of integrating the social studies learning through teaching materials. The third was the material related to the digital video media, aiming to improve the teacher skills in making simple learning videos. The fourth was the material aiming to introduce the use of QR-Code for social studies learning. The last one was the material related to the technical preparation of worksheets for the Social Studies teachers in Sidoarjo.

The general expectation from this workshop is that the social studies teachers in Sidoarjo will have the motivation to improve the social studies learning by making interesting teaching materials accompanied by digital media via QR-Code. This new normal condition and face-to-face learning being carried out slowly will provide new motivation and enthusiasm for students to take part in the social studies learning. Additionally, teachers would also have qualified skills in developing the digital media-based teaching materials.

#### 4. CONCLUSION

The social studies teachers in Sidoarjo during the pandemic already had the desire to adapt to the digital learning process. They tried to make learning video media. Nevertheless, they still had insufficient knowledge to know and utilize QR-Code in the social studies learning. The findings revealed that they had a high level of needs for skills in making learning videos and digital media- and QR code-aided worksheet. Based on these results, it was formulated that five materials would be provided in the workshop activities. It is expected that this activity will improve the teachers' skills in making the teaching materials and digital media and increase the quality of social studies learning in schools.

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