

Development of Student Worksheets (LKPD) Based on a Scientific Approach to Improve Understanding of Legal Concepts and Legal Awareness

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Abstract

This study aims to obtain empirical data on the development of student worksheets (LKPD) based on a scientific approach to improve understanding of legal concepts and legal awareness. The method used is Research and Development (R&D), adapted from the ADDIE development model developed by Dick and Carey. The subjects of this study are 33 students from class XI MIPA at SMA Rimba Madya Bogor, with the students serving as informants, while key informants include the Civics (PPKn) teacher and IT expert. The study was conducted from August to October, during the odd semester of the 2024/2025 academic year. The data collection techniques used in this study were test techniques and non-test techniques. The results of this study show that (1) the design of the student worksheets (LKPD) based on a scientific approach can be used to improve students' understanding of legal concepts and legal awareness. (2) The feasibility of the LKPD based on a scientific approach, according to assessments by material experts and media experts, falls into the 'very valid' category, with validity scores of 0.96 and 0.89, respectively. The responses from students in the limited trial showed that the LKPD falls into the 'good' category (B), with a percentage score of 80.3%. Thus, it can be concluded that the LKPD based on a scientific approach is valid and feasible to be used as an alternative teaching material for both teachers and students.

Kata kunci: Legal Concepts, Legal Awareness, LKPD, Scientific

1 INTRODUCTION

Legal awareness can be understood as an individual's or a community's awareness of the rules or laws in force. Legal awareness is crucial for a society, as it aims to achieve order, peace, harmony, and justice in social interactions. This aligns with Apeldoorn's (2008) view that the purpose of law is to regulate social interactions peacefully. Law seeks peace. According to Kamijah et al. (2021), without a high level of legal awareness, this goal will be very difficult to achieve. A key factor influencing legal awareness is knowledge of the law itself. Legal regulations must be widely disseminated and officially recognized. Once the regulations are well publicized, they will naturally become known to the public. However, those who violate the law are not necessarily aware that they are breaking it.

This may be due to a lack of understanding and knowledge among the public about legal awareness and the regulations within the law itself. Another factor influencing legal awareness is the public's compliance with the law. Thus, all societal interests depend on the provisions of the law. However, there is also a belief that legal compliance is driven by fear of punishment or sanctions that will be imposed for breaking the law. According to

Soekanto (2012), legal awareness is an abstract concept within individuals, concerning the harmony between order and tranquility that is desired or deemed appropriate. Legal awareness is often associated with legal organization, law formation, and the effectiveness

of law. It represents the awareness or values related to existing laws. What is actually emphasized is the values regarding the function of law, rather than legal judgments on specific events occurring in the society concerned.

The lack of legal awareness in a region will result in a society that is less conscious of the law. Building legal awareness from an early age does not have to wait until violations occur and law enforcement takes action. Preventive efforts are considered very important and can start within the family as the smallest unit of society. With legal awareness, we can witness the absence of violations, leading to an ideal way of life. Formal, informal, and non-formal educational institutions need to work together to develop legal awareness and intelligence from an early age. Legal education is not limited to formal education in the classroom. It can also be conducted outside of school. Teaching children about the law from an early age is essential so that they develop a sense of the importance of legal rules. This way, legal awareness will be instilled from a young age.

Essentially, studying legal concepts is learning about community life, as law aims to regulate peaceful social interactions. Learning legal concepts requires good memory due to its memorization nature, and understanding the material also requires frequent reading. According to Munawir in Fitriani Sabir (2022), many students feel that certain legal concepts are not enjoyable to study, as they tend to rely heavily on memorization, which leads students to feel bored and weary. Memorizing terms like Latin names is often challenging because the language structure differs significantly from everyday language, making it difficult to remember yet quick and easy to forget. This difficulty affects students' ability to understand and absorb the material presented, impacting their learning outcomes. Emphasizing the importance of seeking truth is crucial to prevent misconceptions.

A good learning process will have a positive impact on students' learning outcomes. According to Agustina et al. (2018), these outcomes are achieved through the learning process that takes place between teachers and students. Therefore, as noted by Sariningsih et al. (2020), if students' learning outcomes do not meet the required criteria, improvements can be made by using teaching models that align with the material being presented, the students' conditions, available resources, and the teaching objectives. To meet students' needs, a well-designed learning material that students can fully absorb, focusing the learning process on them, is needed namely, the LKPD (Student Worksheet). An LKPD (Student Worksheet) is a set of sheets containing tasks that students must complete. The activity sheets generally include instructions and steps for completing a given task. Each task outlined in the worksheet should clearly state the basic competencies to be achieved (Nurul Hidayah et al., 2017). With LKPDs, students become accustomed to learning independently and creatively, having ample opportunity to express their ideas during learning activities, as well as working collaboratively, both within their own groups and with others, to solve problems or address challenges (Ermida, 2016).

The development of LKPDs (Student Worksheets) can utilize several approaches, one of which is the scientific approach. The scientific approach is a learning process designed to help students understand the material and concepts they are studying through five stages: observing, questioning, gathering data or information, associating or reasoning, and actively communicating the material (Devi Ananta, 2015). Learning activities with the scientific approach include steps that help students solve problems in a scientific, logical, and analytical manner and then communicate their ideas to their peers. In addition, the scientific approach can enhance problem-solving skills, as it allows students to fully apply their academic knowledge and skills both inside and outside the school environment to address existing problems. This approach also helps students become more communicative in expressing their ideas (Beata Dahlia, 2016).

Learning with the scientific approach has characteristics that provide advantages for the learning process, namely: it is student-centered, enables students to form their own knowledge concepts, avoids rote memorization, allows students to assimilate and accommodate concepts, laws, and learning principles, encourages the development of students' critical thinking skills, enhances students' learning motivation and teachers'

teaching motivation, offers students opportunities to practice communication skills, and includes a process of validating the concepts, laws, and principles that students construct within their cognitive structure. Based on interviews conducted by the researcher with the PKn (Civics Education) teacher at Rimba Madya High School in Bogor, it was noted that the teacher still uses a conventional teaching model in delivering material. Learning legal concepts is seen as content-heavy and requires memorizing foreign terms, making it difficult for students to understand. Most 11th-grade science students at Rimba Madya High School in Bogor struggle to comprehend all the material.

As a primary informant in the learning process, the teacher must be able to select appropriate strategies and teaching media. This approach ensures that during the lesson, students are not merely listening and memorizing the material but are actively engaged and able to understand the concepts being taught. An LKPD (Student Worksheet) is one type of teaching medium that teachers can use to gauge students' comprehension of the material. According to Wulandari, cited in Puput Putriani (2020:13), LKPDs play a significant role in the learning process as they can enhance student engagement and, when used effectively, help teachers guide students in discovering concepts through their own activities.

Bohori, as cited in Dian Fitriana, reveals that in LKPD (Student Worksheet) which applies the stages of the scientific approach, the learning process becomes easier, more systematic, structured, and enables straightforward evaluation of students' learning activities. Moreover, the use of LKPD with a scientific approach helps to enhance the effectiveness of the approach through activity stages, serving as a recording tool for students' activities (Dian Fitriana et al., 2016).

2 RESEARCH METHODS

The method used is Research and Development (R&D), a development research method aimed at producing a specific product and testing the effectiveness of that product. (Pudjiastuti, SR. 2019). The development model used in the research is adapted from the ADDIE development model, with the stages of Analysis, Design, Development or Production, Implementation or Delivery, and Evaluation as developed by Dick and Carey. (Sugiyono:2019). The subjects of this research are 33 students from Class XI MIPA at SMA Rimba Madya Bogor, who serve as informants, along with key informants including the Civics (PPKn) teacher and an IT expert. The research was conducted from August to October during the first semester of the 2024/2025 academic year. Data collection techniques used in this study include both test and non-test methods: a test to measure understanding of legal concepts and a questionnaire to assess legal awareness. Before being used, these instruments were tested on respondents outside the sample to determine the validity and reliability of the items. Another instrument is a questionnaire designed to assess the needs of teachers and students for the development of LKPD (Student Worksheets) based on a Scientific Approach. Additionally, a validation questionnaire is used to gather feedback and assessments from material and media validators regarding the development of the Scientific Approach-Based LKPD (Student Worksheets).

3 RESULT AND DISCUSSION

Based on the research results, an analysis can be conducted according to the issues presented as follows:

3.1 Product Design Data Analysis for LKPD Development

The LKPD product developed is a Scientific Approach-Based LKPD focused on the topic of the legal system and national judiciary. To assess the feasibility of the LKPD, validity testing was conducted by subject matter experts and media experts before trialing it with students.

The scores from the assessments by the subject matter and media experts were then analyzed using Aiken's formula.

The content feasibility aspect received a validity score of 0.93, categorized as highly valid. Content feasibility was assessed based on the alignment of the material, indicators, and learning objectives in the LKPD with the core competencies (KI) and basic competencies (KD) for the legal system and national judiciary material in Class XI MIPA at SMA Rimba Madya. Fatmawati (2017) states that the content in an LKPD must be aligned with the applicable core and basic competencies to ensure that students' learning needs in the specified material are met. Additionally, content feasibility was evaluated by the constructive presentation of material through a problem-solving model that can develop students' skills and understanding. A recommended improvement for this aspect is to ensure that the indicators and learning objectives better reflect the inclusion of ethnoscience elements to be studied in the LKPD.

The next aspect is the presentation feasibility, which received a validity score of 0.92, categorized as highly valid. Presentation feasibility includes the coherence and consistency of the LKPD's presentation, which can engage students, support independent learning, and includes supplementary elements such as explanations of ethnoscience, learning instructions through the scientific approach, and a bibliography. In this aspect, the validator suggested that the bibliography be expanded to serve as a more comprehensive reference source for users who wish to seek additional information beyond what is provided in the LKPD. The third aspect, language feasibility, also received a highly valid rating, with a perfect validity score of 1. Language feasibility encompasses the clarity of language use and the appropriateness of sentence structure according to linguistic standards. The language used must also be clear, easily understandable, and unambiguous, as language serves as a medium for students to comprehend the information presented in the LKPD. (Iktifaul Ulya, 2022).

The scientific approach stages aspect received a validity score of 0.96, categorized as highly valid. This aspect includes the presentation of contextual problems and the integration of scientific learning steps, starting from problem orientation, learning organization, investigation, presentation of results, and, finally, reflection and evaluation, which help students understand the material concepts through problem-solving. Problem presentation in the scientific approach can serve as a stimulus for students in their learning process (Mitarlis, 2021). The subject matter validator suggested adding a reflection/evaluation activity at the end of the material to allow students to further develop ideas and ethnoscience insights beyond what has already been covered in the LKPD.

The last aspect is the ethnoscience content aspect which obtained a validity score of 1 with a very valid category. The assessment of the ethnoscience content aspect includes the suitability of the discourse presented in the LKPD with the material, and can add insight into knowledge. According to Rahayu & Sudarmin (2015) the purpose of ethnoscience in learning is to introduce students to facts or phenomena that develop in society that can be related to the concept of scientific material as a source of science, so that students' insights will increase. Just like the assessment of material experts, the assessment by media experts also has aspects of criteria that must be met. The average assessment of media experts in each aspect gets a valid to very valid category. The highest validity value is in the aspect of using images, illustrations and videos, and aspects of software engineering, each of which is 1 with a very valid category. The feasibility of images and illustrations includes the use of attractive, clear and colourful images/illustrations, which are displayed in accordance with the material, and of good quality.

The next aspect is the feasibility aspect of graphics which obtained a validity value of 0.95 with a very valid category. Graphic feasibility includes the attractiveness of the LKPD display starting from the cover which is designed with attractive colours and there are illustrations that describe the contents of the LKPD, consistent and proportional layout, and the use of font types and sizes that are easy to read. According to Fatmawati (2017) in making teaching materials in addition to compiling content, it is also necessary to pay attention to the type and size of the font used, the layout, and the appearance design to

make it attractive. In the aspect of graphical feasibility, the validator provides suggestions for improving the layout elements of the LKPD content. In the presentation feasibility aspect and the display quality aspect both get a validity score of 0.75 with a valid category. The feasibility of presentation based on media experts includes the arrangement of the contents of the LKPD which is sequential and systematic and the presentation is in accordance with the needs of students, while for the display quality aspect includes the overall attractiveness of the LKPD design both cover and content, as well as the harmony of colours, illustrations, and typography.

From the results of the assessment and improvements that have been made based on the expert validator's suggestions, the LKPD based on the scientific approach developed can be declared valid/fit to be tested on students. This is in line with the results of research by Hidayah *et al.* (2020) that the LKPD based on the scientific approach is valid in terms of the feasibility of presentation content, language, and graphics with very good categories. Valid teaching materials mean that the teaching materials have met the specified criteria standards, so they can be used in the learning process (Diani *et al.*, 2016).

3.2 Analysis of Product Feasibility Data of Scientific Approach-Based LKPD Student

Response data was obtained from filling out response questionnaires and unstructured interviews. Only 9 small class trial students filled out the response questionnaire. Students assessed the LKPD in five aspects, namely content quality, appearance, readability, learning interest, and usability. Students' assessment scores for the LKPD were analyzed to obtain the percentage of quality for each aspect. Based on the results of student assessments, it is known that the usefulness aspect obtained the highest percentage of 87.8% with a very good category.

Through interviews, students revealed that scientific approach-based LKPDs, in addition to containing questions and problems, also contained explanations about examples of ethnoscience in the surrounding environment that could increase their knowledge. In addition, students also felt helped because the LKPD made it easy for them to learn anytime and anywhere because the presentation was practical. This is in line with research conducted by Lailiah *et al.* (2021), that teaching materials in the form of LKPD can be used by students anywhere even though they do not carry out face-to-face learning directly. In terms of use, the percentage obtained was 85.9% with a very good category. Most students said that they did not experience difficulties in using or accessing LKPD, but there were some students who had difficulties due to signal and internet quota constraints. The characteristics of the LKPD developed are in the form of LKPD that can be flipped through like a printed book (Fitriasari & Yuliani, 2021).

The LKPD format is in the form of an html file that can be accessed online via a smartphone, laptop, or computer. The next aspect is the appearance aspect, the percentage of which was 84.4% with a very good category. Students said that the appearance of the LKPD was very attractive, especially since there were pictures and illustrations presented in the LKPD, because so far the LKPD they had used was in the form of printed media and was not colored (black and white). Gabriella & Mitarlis (2021) stated that LKPD needs to be designed and made as attractive as possible by choosing attractive colors and supporting illustrations so that students can be motivated to learn. The aspect of content quality obtained a percentage of 75.9% with a good category.

According to students, the contents of the LKPD are easy to understand and the steps of learning activities presented help them to learn the material on the national legal and judicial system, but some students expressed that they found it difficult when working on practice questions at the investigation stage and the evaluation stage. This is because

students are not used to using worksheets based on a scientific approach in PPKn learning activities. Jasperina & Suryelita (2019) in their research revealed that LKPD based on a scientific approach directs students to learn to find their own concepts with scientific learning syntax. Finally, the aspect of learning interest obtained a percentage of 73.9% with a good category. Some students admitted that they were interested in learning the national legal and judicial system using LKPD based on a scientific approach. This is because the LKPD that was developed contains material on the national legal and judicial systems that exist in everyday life.

From all the results of student assessments of LKPD based on the scientific approach, a percentage of 80.3 was obtained. Thus, it can be interpreted in general that the LKPD resulting from the development received a good response/feedback from students. This is in line with the results of Febrianti's (2017) study that LKPD based on the scientific approach received a good/interesting assessment category from students with a percentage of 79%, and the results of Astari & Sumarni's (2020) study which stated that LKPD containing ethnoscience can be used well after receiving a student response of 70%. Based on the analysis of expert validation data and student response data that has been carried out, the quality of LKPD based on the scientific approach according to material experts and media experts gets a very valid category with validity values of 0.96 and 0.89 respectively, while the assessment of the quality of LKPD by students gets a good category with a percentage of 80.3%. The results indicate that LKPD based on a scientific approach to the material of the national legal and judicial system that has been developed can be an alternative teaching material that can support learning activities for both teachers and students.

3.3 Analysis of the Effectiveness of Scientific-Based LKPD to Improve Understanding of Legal Concepts and Legal Awareness

Understanding the concept of law is a different concept from legal knowledge, because sometimes someone knows that there is a rule but does not understand its contents or vice versa. Related to legal compliance, the concept of understanding the contents of the law according to Soekanto (2012; 243) based on the results of his research on compliance with traffic regulations states that; knowledge of the contents of regulations has a positive influence on legal compliance due to the process of imitation and internalization, and it is still necessary to take into account the problem of the role of law enforcers. From this statement, it can be seen that there is a significant influence between understanding the contents of the law on legal compliance.

This can be a basis for the author to see the influence of understanding the contents of the law on legal compliance related to laws and regulations. The relationship between the concept of law and legal awareness can be seen from the statement of A Podgoresky quoted by Soekanto (2012) who sees the difference between fundamental attitudes, namely the tendency to agree to a legal norm or rule because it is worthy of being obeyed as a legitimate part of the law, and instrumental attitudes, namely the tendency to agree to a legal norm or rule, because it is considered an advantage or usefulness. This means that legal awareness based on instrumental legal attitudes reacts by calculating the advantages and disadvantages of a legal rule for the individual. While legal awareness based on fundamental legal attitudes reacts based on not prioritizing personal interests and this is considered a more stable attitude (Soekanto; 2012).

So the relationship between the concept of law and legal awareness according to Soekanto (2012; 245) is that awareness as a whole influences compliance which cannot be doubted. In other words, it can be said that legal awareness has a significant effect on community legal compliance. Legal behavior patterns and legal awareness. The relationship between legal behavior patterns and legal awareness is very close. Because

according to Soekanto (2012; 247) every behavior that is in accordance with the law is one of the characteristics of a fairly high level of legal awareness. Thus it can be concluded that the pattern of legal behavior significantly influences legal awareness. From the explanation, it is clear that legal awareness with the dimensions in it can be connected to whether the legal rules are obeyed or not obeyed by the community. Therefore, the author uses this theory to see the understanding of the concept of law and legal awareness.

4 CONCLUSION

The conclusion of the research and product development results that have been carried out are as follows: the design of LKPD based on a scientific approach can be used to improve the understanding of legal concepts and legal awareness of students in Class XI MIPA SMA Rimba Madya Bogor. The quality of the feasibility of LKPD based on a scientific approach based on the assessment of the validator of material experts and media experts is included in the very valid category with validity values of 0.96 and 0.89 respectively. The results of student responses in the limited trial showed that LKPD was included in the good category (B) with a percentage of 80.3%. So it can be concluded that LKPD based on a scientific approach is valid and feasible to be used as alternative teaching materials for teachers and students. Thus, LKPD based on a scientific approach is feasible to be used to improve the understanding of legal concepts and legal awareness of students in Class XI MIPA SMA Rimba Madya Bogor. Based on the results of the calculation of the teacher response questionnaire, an average score of 86 was obtained from a total of twenty assessments. The calculation results are in the good category. This score indicates that teachers agree if learning uses the Student Worksheet that has been developed. Based on the questionnaire that has been filled out by students, it is known that the average overall score is 75 out of a total of eighteen. The calculation results are in the good category. This indicates that students strongly agree to learn using the developed learning LKPD. Thus, LKPD based on a scientific approach is effectively used to improve the understanding of legal concepts and legal awareness of Class XI MIPA students of SMA Rimba Madya Bogor.

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