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Design of the Electronic Report Sheet Model for Field Work Practices to Improve the Competence of Superior and Competitive Vocational Education Graduates

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ABSTRACT

The design of the e-report sheet model for Industrial Work Practices is expected to be able to improve the competence of Vocational Education Graduates who are superior and competitive in accordance with expertise that is relevant to the world of work. Orientation of student competence in a particular area of expertise is a hallmark of vocational education. Industrial Work Practices (Prakerin) is a field experience learning program for Vocational High Schools (SMK) which is carried out specifically as a manifestation of dual system education to meet the needs of students in learning activities in accordance with the realities of the business world and the industrial world. The place for carrying out the internship can be in the form of a private company or a government agency. The e-report sheet model which contains activities that are carried out and reported electronically is expected to increase the competency of superior and competitive graduates. This research was designed in stages using a Research and Development (R&D) approach, with a series of trials and model validations. The e-passport sheet model is used to monitor apprenticeship activities in achieving competency according to the needs of the business world/industrial world. The stages of Analysis, Design, Development, Implementation, and Evaluation were used in this research on the Prakerin e-report sheet model and a questionnaire to measure the competence of SMK graduates. The trials were carried out at SMK 7 and 1 Semarang. The data analysis used in this study is categorical to determine the feasibility level of the e-report sheet model of practical work in accordance with the KKNI planned from media experts, namely senior teachers and academics (lecturers), while material experts from academics (teachers) and representatives from industry.

***Keywords**: Design, Model, e-report Sheet, Prakerin, KKNI.*

1. INTRODUCTION

Appropriate competencies possessed by prospective workers must be standardized and professional to enter the world of business and industry, besides that vocational education graduates are also prepared to create jobs. Competence knowledge, skills and experiences that are built and accumulated in a person to be able to compete in the world of work must be matched. Competencies that don't match mean you can't be competitive, therefore one of the vehicles for competent training is to get used to it at school, so you need to constantly hone your skills competencies so that they match the needs of superior and competitive graduates in the future and continue to strengthen yourself to be better prepared to face various changes.

Efforts to increase the competency and competitiveness of vocational education graduates are carried out with quality and relevance development strategies and fostering a number of 1650 reference SMKs in 2015-2019 and the Center of Excellence Vocational High School Mechanism which can produce graduates who have national identity able to develop local excellence and compete in the market globally with reference to the quality of education with international competitiveness. (Ministry of National Education Strategic Plan, 2015-2019).

Efforts to improve the quality of Vocational Schools in 2020 are made to improve skill competency through revitalization and strengthening programs for the Center of Excellence Vocational School (SMK-PK) which program Link and Super Match in producing future workforce candidates according to the level of industry needs, Besides that, improving the quality of vocational education must be carried out in an effort to increase Skill competencies (standard Practices, Preventive Maintenance, Inspection, Troubleshooting, Modification), Knowledge (Basic Machines, Machine Maintenance concepts, Manual Maintenance, Regulations, Human Factors), and Attitudes (Analythical Thinking). , Team Work, Achievement, Integrity) as future workforce candidates with a level of confidence, self-existence for institutions and industries. To produce graduates who are ready to work must be followed by a learning strategy that is similar to the industry. Therefore, to imitate the processes and requirements of working in industry, SMKs must be encouraged to collaborate with industry. Furthermore, SMKs and industry can jointly improve the quality of SMKs so that the quality standards of SMKs will increase.

21st century learning requires students to be able to master technology. Bahat, et al (2017) explained that in order to survive in the 21st century, students must be able to grow and have 21st Century Skills, namely the ability to think critically, creatively, communicatively, and collaboratively. Gasskov in Permana and Sukoco, 2017, states that "The mandate of vocational education and training is manifold. First, the vocational education and training system should deliver both foundation and specialist skills to private individuals, enabling them to find employment or launch their own businesses, to work productively and adapt to different technologies, tasks and conditions...". This statement has the meaning that vocational education is required to be able to provide basic and specialist skills for individuals that enable students to be able to find work or start their own businesses, and also to work productively and be able to adapt to changes or technological developments, tasks and conditions in the world of work.

Industrial Work Practices called Prakerin is an activity that has an important level and will provide experience that will be used in the future by students with direct experience in the business world or the industrial world that will improve students' mentality when working later. Permendikbud Number 60 of 2014 states that internships can be carried out using a block system for half a semester or three months. It can also be carried out by entering three days a week, eight hours every day for one semester. The implementation of group A and B subject learning can be carried out in educational units and/or industry in an integrated manner with report sheets as portfolios as the main instrument for achieving competency through the activities carried out. The objectives of implementing Internships are: (1) actualizing the model of implementing a dual system of education between Vocational Schools and the business world and the industrial world (DU/DI) which systematically integrates educational programs in Vocational Schools and skills mastery training programs in the world of work; (2) dividing learning topics from basic competencies that can be implemented in schools and those that can be implemented in DU/DI according to the resources available to each party; (3) provide direct work experience to students in order to instill a positive work climate that is oriented towards caring for the quality of work processes and results; (4) providing students with a high work ethic to enter the world of work in facing the demands of the global labor market (Hamalik, 2007).

SMK Negeri 1 Semarang will carry out internships in two stages, namely the first will be held in July – October 2022 which will be attended by some class XI students. While some of the other class XI students took part in the Internship in the second stage which was held in January - April 2023. Students who did not carry out the Internship in the current stage/period continued to fully participate in class as usual. As for students who carry out Internship in the current period will take part in class learning after completing the Internship program.

The problems will be (1) The achievement of basic competence is not optimal. This is because the internship time allocation is only short, it can be said that it is less compared to the number of competencies that must be mastered by students. This is based on the average achievement of basic competency in group A, group B and group C subjects, which is less than 75%; (2) It is necessary to adjust the journals used by students during internships. Students who carry out internships require adjustments to the learning atmosphere in the industry according to the Indonesian National Qualifications Framework (KKNI). After being used to the practical atmosphere in the industrial world for 3 months, most students find it difficult to catch up on learning material. From the other side, the teacher will also deliver learning material by drill; (3) Student learning outcomes are not optimal. The two previous problems resulted in students not mastering the learning material in the semester that went well. This is based on the average learning achievement of students who have just implemented internships which is only 72%.

The Prakerin Report Sheet used so far is in the form of a printed book so there are several weaknesses. Weaknesses of the Internship Report Sheet in the form of a printed book used so far include: (1) The printed book Prakerin Report is impractical because it is prone to getting dirty, damaged and lost; (2) Print book Internship Reports contain blank blanks so that students feel confused about filling them out; (3) Print book Internship Reports are only in the form of activity titles, not equipped with a report sheet so they cannot be used as a portfolio of student competence achievements during competency tests.

On the basis of the background above, the researcher is interested in conducting research on the effectiveness of the e-report sheet model according to the SKKNI with the aim of (1) preparing learning according to the demands of the KKNI Scheme (2) to prepare competency tools in the form of electronic-based report sheets (3) validation of e-report sheets to achieve standard and professional competencies.

Based on the background above, the following problems were identified: 1) Prakerin activities were not controlled in accordance with the SKKNI, 2) Report Sheets as hard copy-based competency records required a lot of paper, 3) The ability of productive teachers and industrial teachers to use and preparing the e-report sheet according to the KKNI is not the same and the format of this e-device changes frequently, causing standard competency standards for DUIKA and KKNI to be missed,

The problems to be examined include among others:

1. How to develop an online Internship Report Sheet model according to the Integrated SKKNI?
2. To what extent can the eligibility level of the Report Sheet Practical Internship model integrated online improve the competence of SMK graduates based on the KKNI?

2. THEORETICAL FOUNDATION AND LITERATURE STUDY

2.1. Vocational Education

Quality of Vocational Education is defined as "the ability to meet the requirements expected by customers, both group and individual customers as customers who receive goods and services based on the characteristics of a product. To get to good management based on the requirements of ISO Certification As a written acknowledgment statement is given to an institution that has implemented ISO as a standard in organizing an organization after carrying out an internal and external audit process.

This is intended to increase customer satisfaction through educational services, develop awareness of the need to provide excellent service to customers, educate yourself (school administrators) to obey something agreed. The benefits are increasing satisfaction, building awareness of school management in implementing excellent service, as well as educated school managers in complying with something that has been agreed upon by both internal and external customers.

Barriers to inequality in the output of vocational education with job demand/growth, vocational education policies have not been strong enough to lead to efforts to reduce unemployment, there is no policy that integrates education and training towards Continuing Education, there are still few opportunities for unemployed groups to take part in vocational education/training, there are still many vocational education institutions that orient their teaching and assessment. to achieve the curriculum, not towards proficiency in accordance with the competencies required by employment, outdated practical facilities and equipment, lack of opportunities for students to practice in industry, weak coordination between the Ministry of National Education and the Ministry of Manpower in handling vocational education/training, weak coordination between the National Standardization Agency Education (BSNP) with the National Professional Certification Agency (BNSP), there is weak coordination between in- school education and out-of-school education in handling vocational education.

Further policies that are needed are policies that regulate the balance between the structure of the type of expertise and the number of vocational school graduates needed with the structure provided, there needs to be a policy on the implementation of Seamless Education, transnational standards of vocational teachers (Transnational Standards), teacher training policies/vocational instructors in positions and up-to-date skills in industry, policies to modernize vocational education, policies that allow vocational education to serve all community groups including the unemployed, because unemployment data according to the Ministry of Manpower and Transmigration in 2017 was 1,360,219 people and underemployed as many as 5,129,670 which consists of the forced unemployed (2,664,689) and the unemployed 2,464,981 due to the slow completion of the economic crisis, even this unemployment is supported by the large number of layoffs.

2.2. Model E-Report Sheet

The presence of information and communication technology products is needed to support and improve the quality of the street vendors process. Some examples of information technology tools that are developing in the world of education include: interactive modules, electronic modules, electronic journals (e-journals), and electronic job sheets. E-journals or electronic journals themselves are records of events that have been structured and systematically arranged electronically from day to day which can only be accessed using computer electronic media.

According to Pendit (2007), electronic journals or e-journals can be interpreted as electronic representations of a journal. This means that the electronic journal is actually still the same as the printed journal, and what distinguishes it is the form of presentation (format) and because it is distributed via a digital network, what is distributed is the electronic or digital version. Harsana (2019) states that an electronic journal is a journal that contains all aspects its preparation, review, publication, and dissemination are carried out electronically. According to Nawakowski, et all (2007) electronic

journals can be grouped in terms of freedom of access, namely: 1. Electronic journals that can be accessed free of charge and can be printed as well as downloaded freely. 2. Electronic journals that cannot be accessed without a password or without paying a subscription to the vendor selling it. Some research results related to learning using electronic journal media conclude that the application of e-journals as a learning medium is relatively simple, consistent and systematic, it is hoped that it can motivate teachers and students to increase their understanding of learning material by utilizing information technology (Trianti, 2021). Another study written by Fidian (2021) reveals the fact that learning using e-journal media is in the high or very good category, while the quality of learning is in the sufficient category. In addition, it was found that learning using e-journal media has a positive and significant influence on the quality of learning.

To implement e-journal media in school institutions, of course, supporting facilities and infrastructure are needed. The results of observations made at SMK N 1 Semarang have facilities and infrastructure that support the use of e-journals. These facilities and infrastructure include: (1) the available internet network infrastructure is very proper and adequate; (2) the availability of special servers that can serve and manage internet and intranet network traffic; (3) there is an adequate computer laboratory, (4) the quality of human resources at SMK N 1 Semarang, both teachers and students, are good in terms of IT skills.

So far, research on e-journal media for PKL students has not been carried out much. So far, most research has only focused on certain subjects in class, and a significant impact has not been felt for teachers and students and is only related to the running of street vendors, not yet reaching the competencies targeted at street vendors. In terms of content, the e-journal media products that have been developed and researched so far tend to be less precise, namely the details of activities that are less specific and do not support match, namely in accordance with the KKNI.

Based on the background of the problems above, this research will examine the development of appropriate street vendor journals and at the same time can be used as a portfolio of student competency achievement.

3. RESEARCH METHOD

The research model chosen in this study uses the ADDIE model. The ADDIE development model is one of the models that uses simple and systematic steps in developing the e-report sheet model according to the KKNI learning in Competency-Based and Industrial-Based clusters or units so as to achieve competence skills or skills (life skills). Model Analysis, Design, Development, Implementation, and Evaluation have an evaluation that aims to determine the knowledge competence of students before and after. ADDIE is an instructional design model applicable to all types of education and despite the fact that ADDIE comprises the components of all other design models, it is a relatively simple model (Arkun, 2008)

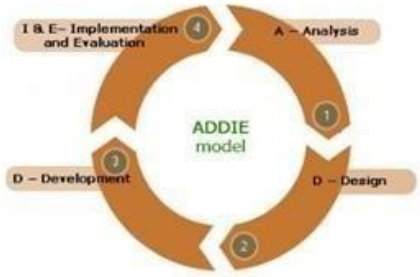


Figure 1. ADDIE Model (Source: Muruganantham, 2015)

3.1. Procedures for developing and Validation

Development of an e-Repport Sheet for Internship learning so that the process of achieving competence skills or skills (life skills) is recorded online and in its implementation it is integrated into learning since class XI,

The ADDIE model consists of five stages, namely Analysis, Design, Development, Implementation, and Evaluation (Pribadi, 2016: 23). The stages are described as follows:

1. Analysis (analyzing) which includes needs assessment, identification, goals, analysis of knowledge, skills, and attitudes.
2. Design, namely designing/making an overview of the product, determining specific competencies, methods, evaluation materials, and strategies for implementing learning designs.
3. Development (developing), namely producing a model e Report sheet that will be used in the internship program.
4. Implementation, namely carrying out the Model Report Sheet by implementing the design according to the specifications of the Prakerin program.
5. Evaluation, namely evaluating the Prekerin program and evaluating it based on the notes on the report sheet. Based on the flowchart of the development procedure above, the procedure for developing the e-report sheet model at Prakerin, the process of achieving competence skills or skills (life skills) is recorded online and in its implementation it is integrated into learning since class XI, The design of the e-reppot sheet is based on the results of the analysis the needs that have been carried out in the previous stage (Pribadi, 2016: 173) and at this stage it is necessary to clarify Internship skills according to the KKNI so that the process of achieving competency skills is recorded online as expected.

3.2. Data Collection Techniques and Tools

Data collection in this study was grouped into two stages, namely: first, preliminary and development studies; second, the trial and effect stage. In the preliminary study and development stage, questionnaire, observation, and documentation techniques were chosen, in addition to literature review. At the trial and effect stage, the main data collection techniques were observation and questionnaires. Data collection tools/instruments developed in this study relate to data collection techniques carried out at each stage of the study, namely: (a) questionnaire (question list), and checklist, used to ask questions and make observations on preliminary study and design development stage; (b) a list of questions and checklists, also used to ask questions and observations in the design and pilot test phase.

3.3. Data Analysis Techniques

Data analysis in this study is described in three stages (study), namely the preliminary stage, the results of design development, and the results of trials and inducements. In the preliminary study stage, the findings or facts about the current productive learning program (Prakerin) are described in the form of data presentation (mean, median, mode, etc.), then analyzed (interpreted) qualitatively. With this approach, the analysis used in this stage is called descriptive qualitative.

The process and results of the development of e-Repport sheet development in Prakerin learning since class XI were analyzed by peer-group and expert judgment. The results of the trials and the induced analysis used are descriptive in the form of data presentation; Likewise, the size of the applicability of the design is analyzed descriptively qualitatively.

The achievement of the research objectives is described in a research systematic which describes the time period, research scope, and outcomes as follows: (1) identify and analyze the development of e-Repport Sheet development in Internship learning, (2) analyze the existing model of e-Repport sheet design development, and (3) compiling a design for the development of the e-Repport Sheet which is validated through focus group discussions (FGD), which is presented in Table 1.

Table 1. Research Scheme.

Phase	Research Scope	Achievement indicator
Phase 1 Preliminary and Development Studies	Identification and analysis of skills (skills) Prakerin	Model of e-Repport Sheet Internship class XI Model e-Repport Sheet Internship in accordance with KKNI as outlined in Academic Papers and published in scientific journals
Stage 2 Develop and Validation of e-repport Sheet Prakerin	Development of e-Repport Sheet Prakerin validated	e-Repport Sheet Prakerin validation result and FGD.

3.4. Assumption of product limitations

Product specifications developed in this development research are: (1) The format used in the Prakerin e-Report Sheet (2) The tools developed are online-based using facilities made by Google, (3) the Prakerin e-Repport Sheet which is made according to KKNI, (4) and the designs developed were made with google form, the results of the recording in spreadsheet form and displays for students and assessors were made using the google site and made 1 in google drive, (5) this internship e-Repport Sheet can only be accessed online via the internet network.

Development of an Internship e-Repport Sheet with Google Forms that can be used to conduct online quizzes, surveys on the effectiveness of Internships, collect Prakeri activity data to collect easy information in an efficient manner. Forms can also be linked to spreadsheets. If the spreadsheet is associated with a form, the responses will automatically be sent to the spreadsheet. Otherwise, the user can take a look at the "Response Summary" page accessible from the Feedback menu. Google Form is not as a separate application, but as part of Google Drive. Google Apps is a paperless culture so that everything is made online, even the tabulation of results is automatically online

3.5. Research and Development Result

Prior to validation of e-report skill feasibility by material and media experts in this research, it referred to the Research and Development (R&D) stage with the product being developed in the form of an e-Repport Skill Design for Industrial Work Practices in Accordance with the Indonesian National Qualifications Framework with a study of the Department of Light Vehicle Engineering at Schools State Vocational High School 1 and 7 Semarang.

3.6. Implementation of Development with the ADDIE Model

The development model used is ADDIE, with the stages of Analysis, Design, Development, Implementation, and Evaluation. Based on the research and development carried out, the following research results were obtained:

Analysis Result

The first stage in this research is Analysis (Analysis). At this stage what is being done is conducting a needs analysis, e-Repport Sheet Internship according to the KKNI and analysis of graduate competencies. The stages

of gathering information that can be used as material for making products, in this case the product produced is the e-Repport Sheet for Industrial Engineering in accordance with the KKNI for Light Vehicle Engineering, as follows:

1. Analyzing the Internship Report Sheets used in the field, the researcher analyzes the problems of students in carrying out Internships, students' needs for Internship reports that are developed electronically, students' needs for the media to be developed, determining the topics used in media content, and analysis electronic journal in the form of report sheets on industrial work practices according to the IQF. And the results of pre-research observations found that the needs analysis for developing appropriate Internship report sheets is as follows; (1) Analysis of the problems of students in carrying out internships which result in decreased graduate competence, which is caused by the absence of an internship activity journal that can be accessed electronically according to KKNI standards which can attract attention and can make students study independently; (2) Student needs for internship activity journals that can be accessed online. Students need an Internship activity journal that can be accessed online, but still has an IQF standard, which is interesting and can improve graduate competence; (3) students' needs for the media to be developed. Students need media that is interesting and can improve graduate competence. Apart from that, it can also be used for independent study, which contains complete and systematically arranged competency-based packages; (4) Determination of topics to be used as contents for the Prakerin journal activity. The selected journal topic is an Internship activity journal that is up to date and standardized by the KKNI which is integrated online because so far Internship activity journals have not been made online with adequate media and the competencies needed in the field have not been properly available, considering that so far Internship activity journals are in book form, and even then it is considered very difficult to understand, so it is necessary to provide instructions for filling in and easy guidance; (5) Internship competency analysis according to the expected KKNI, which is implemented nationally, can be seen in the Prakerin activity journal section;
2. Analysis of the Needs for Up To Date and KKNI Standardized Internship activity journals. After conducting a needs analysis, the next step is to analyze the needs for up to date and KKNI standardized Internship activity journals. This analysis is a procedure that is carried out systematically to determine the development of the need for up-to-date and standardized online-based internship activity journals.

This analysis was carried out by looking at the curriculum and syllabus of the Light Vehicle Engineering Subject related to whether the development of internship activity journals can increase competency according to the Indonesian National Framework Standards so that they are able to assist students in carrying out Industrial Work Practices. To analyze the material for the Light Vehicle Engineering Industry Work Practice, productive teachers and industry partners are involved. The institutional partner industry plays a role in analyzing the curriculum used in schools. The instrument used is the structure of the curriculum and syllabus used in schools which are adapted to the needs of the partner's industry. This analysis resulted in the Journal of Industrial Work Practice Activities in Accordance with the Indonesian National Qualifications Framework in the Light Vehicle Engineering competency at State Vocational High Schools 1 and 7 Semarang made online with adequate media and the competencies required in the field were not well available.

The results of Graduate Competency Analysis based on observations concluded that there were several characteristics of student competency mastery that were not in accordance with the KKNI, especially in light vehicle engineering competencies, such as: (1) Students were less enthusiastic about mastering competencies, as seen from the activities of students when carrying out internships who only left and attended , there is no discussion or comparison of competencies in schools with those in industry. (2) The involvement of students in the practice process is still very low, so that students tend to be passive and easily bored when carrying out internships; (3) The student's need for internship activities that are detailed and easily accessible from anywhere and at any time, so that a complete and practical internship activity journal can increase graduates' competence.

Internship activities are carried out in various locations, so an Internship Activity journal is needed that can be accessed online, and is KKNI standard and can be accessed from anywhere to overcome existing problems, therefore, researchers developed an Internship activity journal that can be accessed online, and KKNI standards, in addition to generating innovative and creative ideas for students, it is also to increase the competence of graduates so that in the future they can be absorbed properly, and minimize the high unemployment rate. The important points of the results of the analysis carried out can be seen in the following table:

Tabel 2. Tabel Hasil Analisis Kebutuhan Kegiatan Prakerin

Results Analysis (Analysis)		
No	**Action Result**	**Result**
1.	Needs Analysis	a. Analysis of the problems of students in carrying out internships which result in decreased graduate competence.

		b. Analysis of students' needs for internship activity journals that can be accessed online.
		c. Analysis of student needs for the journal to be developed.
		d. Determination of topics to be used as journal content.
		e. Internship competency analysis according to the KKNI.
2.	Analysis of the Need for Journals of Internship Activities that are Up To Date in Accordance with the KKNI	Examine the curriculum and syllabus of the Light Vehicle Engineering Mapel related to whether the development of the Journal of Internship Activities electronically is for the attainment of competence in accordance with the SKKNI so that it is able to assist students in carrying out Prakerin and as a portfolio in the test competence.
3.	Graduate Competency Analysis	a. Students are less enthusiastic in mastering competence.
		b. Student involvement in the practice process is still very low
		c. The student's need for an Internship activity journal that is detailed and easy to access

Design (Perancangan)

The second stage of the ADDIE development model is the design or planning stage. The design stage is carried out to make it easier for researchers to design the media to be built. The design stage includes the criteria for preparing the initial appearance of the application, adjusting the menu on the application, application design, and preparing application response instruments.

1. Preparation of Journal Framework for Internship activities.

The preparation of the Internship activity journal framework is based on the standard guidelines for the preparation of electronic journals from the director general of training and productivity development of the Ministry of Manpower and Transmigration in 2013. The Internship activity journal to be developed consists of three main parts, namely the initial appearance, contents and results of the Internship. The initial display section contains covers, location maps, menus, and instructions for using the journal. The contents section contains Internship guides, Internship materials, and activity journals. The final section contains monitoring and the results of internship. The following is an outline of the Prakerin activity journal compiled:

The initial appearance of the journal contains: Logo of the modeling agency/institution, Writing: e-Repport Sheet Prakerin, Description and location map, Image of the SMK Bisa!

Instructions for use: Home, Identity, Prakerin Guide, KKNI TKR, Journal of Internship Activities, Download Results, Monitoring, Search

The framework for the electronic prakerin journal developed is an initial display consisting of various menus, from instructions for use to monitoring of the application title, namely: E-Repport Sheet Prakerin Online. It is hoped that a good application initial appearance design can attract users of the Prakerin journal so it doesn't look boring.

Figure 2. Application Initial View

Collection and Selection of the Latest and Standardized KKNII References

The collection and selection of the latest references and the integration of the KKNI developed is the selection of material details used in supporting future Industrial Work Practices (Prakerin) activities, which include conventional ETU, injection ETU, periodic maintenance, spooring balancing, chassis maintenance, maintenance of electrical systems, maintenance air conditioning and others.

The design of the journal menu in user-adjusted applications is expected to be more organized and able to more accurately display needs according to user logins.

Figure 3. Menu on Applications

a) Design of Electronic Journal Report Sheet Prakerin

The preparation of this application design is in the form of adjusting devices that can access, in this case the application can be accessed through any device, as long as it is connected to the internet, either via a cellphone or computer. This application is an online application, where users have login access using their personal account, then filling in the journal begins with filling in the identity which includes the identity of the Internship participant, industry identity and supervisor identity.

Figure 4. Identity Sheet

Preparation of Questionnaire Instruments for Products in the Form of Journals of Internship activities electronically

Preparation of application response instruments, in the form of journal media scoring, namely media expert and material expert validator questionnaires. This instrument adopts a questionnaire from BSNP which has proven its validity, then adjusted to the discussion of the Prakerin activity journal application which can be accessed online, and is standardized with the KKNI. The scoring method of this instrument is a questionnaire with a Likert scale; preparation of feasibility validation instruments.

3. DEVELOPMENT

The third stage of the ADDIE development model is the development or development stage. This stage aims to see how far the feasibility of the media that has been designed. As a follow-up to the design that has been carried out in the design stage, the following development steps are carried out:

1. Development of KKNI Standardized Prakerin activity journal instruments

The development of this media adopts the KKNI model which will be used in the Prakerin program according to the format set by the BNSP. This model is very much emphasized regarding increasing mastery of competencies as a goal, it is hoped that mastery of these competencies by looking at market opportunities that are still wide open can increase graduate competencies to become graduates who have competitiveness and can reduce high open unemployment due to minimal absorption in industry;

2. Validation of Media Experts, Material Experts, and User Responses (Teachers and Students).

This stage is carried out to determine the feasibility of the developed journal. The journal feasibility test was carried out to get suggestions and criticisms from the validator on the product being developed, as evidenced by the results of filling out the response questionnaire which showed that the journal was feasible to use.

The due diligence validators consisted of senior teachers at SMK N 1 Semarang as media experts (WKS Public Relations and TAV teachers at SMK 1) and Learning Technology Developer Experts (Educational and Culture Multimedia Development Center); Material expert validator from two teachers of SMK N 7 Semarang. while from the Suzuki and Mitsubishi car industry as material experts from DUDI, to get suggestions and criticisms from the validator on the product being developed, it is proven from the results of filling out the response questionnaire which shows that the Journal of Industrial Work Practice activities is appropriate to use. The due diligence instrument in this study adopted the BSNP questionnaire which has proven its validity, so there is no need to hold response item trials again. User responses were carried out by users (teachers and students) to find out the practicality of the internship activity journal application which can be accessed online, and standardized with KKNI carried out by 4 light vehicle engineering internship supervisor teachers and class XI students of the 4 person vehicle engineering study program at SMK N 1 and 7 Semarang, to find out how practical the journal is made in its application. The following are notes from media experts and material experts on e-journal report sheet products, as follows:

Table 3. Notes of all members of the media and experts on the e-report sheet product

Validator	Development suggestions and feedback
Media Expert	-Diction (choice of words) is good
	- Gradations and contrast are good
	- Good color combination
	- Pay attention to the placement of tools
	- Uniform the font used
	- E-journal can be used with revisions
Material Expert Materi	-The suitability of the material with the IQF is good
	-Add more Prakerin materials or other materials to fill in material outside the KKNI
	-Simplification of the material from 40 units to 7 clusters is appropriate
	-E-report sheet can be used with revisions

Revision of the Prakerin activity journal

Journals that have been tested for validation by validators which include media experts and material experts, then revise the journal according to the notes of criticism and suggestions written in the supporting statement section, in which case only media experts and material experts can provide supporting statements.

Result Diligence Test Results for Journal of Internship Activities

This stage is carried out to determine the feasibility of the developed Electronic Journal of Industrial Work Practices. The feasibility test of the Electronic Journal of Industrial Work Practices According to the Indonesian National Qualification Framework for Light Vehicle Engineering at Semarang State Vocational High Schools 1 and 7 was carried out by the due diligence validator consisting of senior teachers at SMK N 1 and 7 Semarang as media experts, namely Sunar, S.Pd. , M.Sc (WKS PR as well as TAV senior teacher) and Indaryanto, S.T., M.Kom. (Educational and Culture Multimedia Development Center) as a learning technology developer; The material expert validator from SMK N 7 Semarang teachers, namely Kustono, S.Pd., M.Sc. and Dhewa Exhordig, S.Pd., M.Pd. while from the industry Candra Sigit Mujana from Suzuki and Heru Rubianto from Mitsubishi as material experts from DUDI, to get

suggestions and criticisms from the validator on the product being developed, as evidenced by the results of filling out the response questionnaire which shows that the Electronic Journal of Industrial Work Practices is feasible to use. The due diligence instrument in this study adopted the BSNP questionnaire which had proven validity, so no response item trials were necessary.

Data analysis of due diligence results Journal of Industrial Work Practice Activities According to the Indonesian National Qualification Framework using assessment sheets that have been observed by validators, due diligence scores were responded to by 2 media expert validators and 4 material expert validators of Light Vehicle Engineering study program, consisting of senior teachers, practitioners media, Prakerin supervisors and representatives from industry. The following is the overall scoring for each aspect carried out by all validators:

Table 4. Overall Scoring Data for Each Aspect of the Validator

No	Kriteria	Validator						Mean	Category
		Media Expert		Material Expert					
		1	2	1	2	3	4		
1	Usability	4,25	4,25	-	-	-	-	4,25	Very Worth
2	Functionality	4,38	4,31	-	-	-	-	4,35	Very Worth
3	Visual Communication	4,08	4,25	-	-	-	-	4,17	Worth
4	Sertificat Design	-	-	4,33	4,17	4,33	4,33	4,29	Very Worth
5	Material Content	-	-	3,88	4,50	4,13	4,5	4,50	Very Worth
6	Communication and language	-	-	4,33	4,00	4,00	4,17	4,13	Worth
$\bar{x}$		Overall Member Average						4,28	Very Worth

Based on the data above, it can be seen that the overall average is 4.28 with very appropriate criteria, thus the Journal of Industrial Work Practice Activities According to the Indonesian National Qualifications Framework is declared valid and very feasible. Based on the results of this validation, it can be concluded that the Journal of Industrial Work Practice Activities According to the Indonesian National Qualifications Framework is valid with revisions and does not require significant overhaul and is suitable for use as an Internship activity journal.

Table 5. Supporting Statements of Media Experts

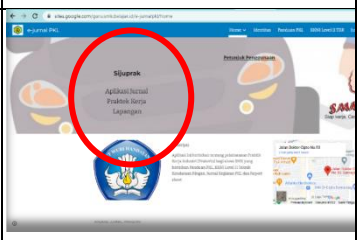
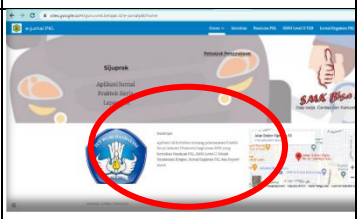
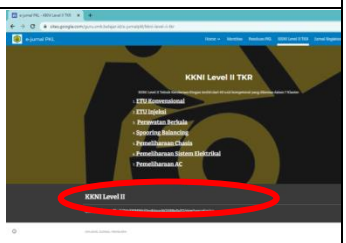
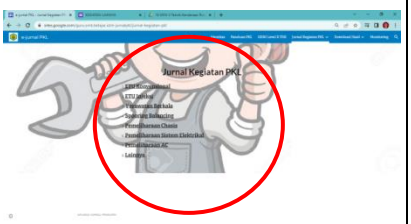
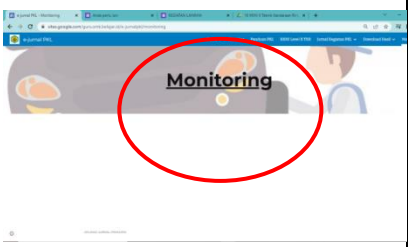
No	Supporting Statement	Journal Section
1.	Try not to cut the logo on the cover so that the placement is more harmonious	
2.	Writing descriptions should be enlarged again so that it is balanced with other sentences	
3.	Writing the active drive link is given a different color, so that users know it's an active link	

Table 6. Material Expert Supporting Statement

NO	Supporting Statement	Journal Section
1.	The Prakerin activity journal is added according to the competencies in DUDI or other menus	
2.	Add biodata directly from the Internship supervisor and Internship participants to make it easier to monitor	

4. CONCLUSION

After conducting a validation test, the result was that the Electronic Journal of Field Work Practices According to the Level II Indonesian National Qualifications Framework has become the final product and is very suitable for use by students to increase graduate competence. The conclusion is feasible in this journal obtained from the validation results of 2 media experts and 2 material experts from senior teachers and industry representatives. At the media expert validation stage, this was validated by senior teachers of the Light Vehicle Engineering study program and Learning Technology Developer practitioners from the Education and Culture Multimedia Development Center. feasible, the Functionality indicator gets a score of 4.35 with very feasible criteria, the Visual Communication indicator gets a score of 4.17 with feasible criteria, of all the indicators that have been mentioned it is included in the media feasibility aspect, after the average score of the media validation results gets score of 4.26 with very decent criteria. In the material expert validation stage, it was carried out by a material expert validator from a SMK N 7 Semarang teacher, namely Kustono, S.Pd., M.Sc. and Dhewa Exhordig, S.Pd., M.Pd. while from the industry Candra Sigit Mujana from Suzuki and Heru Rubianto from Mitsubishi as material experts from DUDI. The results of the validation based on the content feasibility aspect get a score of 4.29 with very decent criteria, the presentation feasibility aspect gets a score of 4.50 with very feasible criteria, the linguistic feasibility aspect gets a score of 4.50 with very feasible criteria, the contextual scoring aspect gets an average - an average score of 4.13 with feasible criteria and the average of all aspects in the material validity test obtained a score of 4.23 with very feasible criteria. This criterion agrees with research conducted by Riza (2018) that e-journals are very appropriate to use to improve graduate competence.

Development of the Feasibility Sheet Instrument, Practicality and Effectiveness of Using the Journal Instrument E-report Sheet Internship.The development of the scoring instrument will be based on the points required for a good application journal tool. In addition, a participant response questionnaire was also developed. The participant's response questionnaire will be adjusted to the requirements of a good application journal by adopting from several feasibility questionnaires, the practicality of which has been proven valid. This application stage can be carried out if the results of the media expert test and material expert test (feasibility test) meet the eligibility criteria.

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