

DEVELOPMENT OF KKNI-BASED TEACHING MODULES ON PETTY CASH MANAGEMENT MATERIAL AT SMK ASTA MITRA PURWODADINanik Sri Haryati,^{1✉} Nina Oktarina², Agung Kuswantoro³DOI: <https://doi.org/10.15294/jeec.v14i1.20893>¹SMK Negeri 1 Purwodadi, Grobogan, Central Java, Indonesia^{2,3}Department of Economics Education, Faculty of Economics, Universitas Negeri Semarang, Indonesia**History Article**Received February, 3 2025
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Published June, 26 2025**Keywords:**KKNi, Teaching
Module, Petty Cash**Abstract**

The purpose of this research to knowing the teaching modules that have been applied so far on the material, developing teaching modules, and producing the feasibility of teaching modules based on KKNi on the material of Petty Cash Management for class XI MPLB at SMK Asta Mitra Purwodadi. This study employs a quantitative approach and a research and development (R&D) method using the 4-D development model. The results of this study indicate that the previously used teaching module still contains several components that have not yet been integrated with KKNi and do not fully cover the competency aspects of students' skills. The material expert validation of the developed teaching module was deemed feasible with a score of 3.25. The media expert validation of the KKNi-based teaching module resulted in a score of 3.60. The Pearson correlation validity test yielded a score of 0.349, indicating validity. The reliability test of the questionnaire instrument for students' responses to the KKNi-based teaching module showed a Cronbach's alpha value of 0.950. The t-test result showed a significance value of 0.000, indicating a significant difference in skill competency improvement between the control and experimental classes, meaning that the developed KKNi-based teaching module is effective. The N-Gain score for improving students' skill competency in the experimental class was 0.76. Development of a KKNi-based teaching module to increase participant skill competency Because it teaches contextual materials so that participants get draft petty cash management and examples studies related cases direct to live in the industrial world.

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INTRODUCTION

The teaching module teaching materials cover achievement learning, flow objective learning, plan implementation learning, teaching materials, sheets work participant education and assess participant education. Yudha and Rahmi (2023) stated that a good teaching module has certain criteria or standards such as its relevance to the current curriculum, the suitability of the method to the material presented, the contents of the book or its scientific perspective, namely whether the theories used in writing this teaching book are appropriate or not.

The education curriculum in Indonesia is compiled and designed based on the Indonesian National Qualification Framework (KKNI). This qualification is an effort to form a framework that sets the quality standards for student learning achievements according to the level of education and training in Indonesia, from elementary school to college. KKNI is a standard for educational units to plan a curriculum relevant to the community's needs and produces graduates who have skills. And the knowledge needed in today's world of work. Anggraini (2020) stated that the KKNI is a curriculum that focuses on equalizing and integrating education (theory), job training, and work experience to obtain recognition of work competencies by the job structure. KKNI is a qualifications framework that pairs, equalizes, integrates, education and training and work experience to award the recognition of the competence of work by the position of labor in various sectors and produce graduates who are qualified and productive by the work competency standards both nationally and internationally with learning outcomes (Manurung, 2020).

The basic principle developed in the Indonesian National Qualifications Framework (KKNI) is to evaluate individual performance in knowledge, expertise, and skills according to learning outcomes (Supriadi, et al, 2024). Ahid, Nur (2021) stated that KKNI embodies the quality and identity of the Indonesian nation through several systems including national education, job training, and the national equality assessment system. The qualification framework aims to produce human resources based on their learning outcomes. Those learning outcomes should showcase the profile of future workers in creating quality work and contributions in their field of work.

Periodic curriculum development is developed to adapt to the development of science and technology, as well as the development of the times (Julaeha et al., 2021). Muhammad, Ismail (2020) stated that one of the important criteria of the KKNI-based curriculum is that it is developed independently by the study program by referring to the established requirements. The era of revolution industry moment this way, teachers can innovate in learning, so that learning is more meaningful and enjoyable. This is also supported by research previously by Samosir (2020) that “innovation in the teaching and learning has to be made for all subjects in the implementation of a competency-based curriculum suitable for KKNI. Various strategies have been carried out to improve student learning outcomes, including the use of teaching-learning methods and strategies, the application of innovations in learning, and the use of learning resources”.

Contextual learning activities can equip students with office management competencies, enabling graduates to be absorbed into the workforce. Although curriculum synchronization with the business and industrial world has already been carried out. However, the reality is indicator absorption graduates in the world of work are classified as Still low on report card SMK Asta Mitra Purwodadi that is by 42.86% (category less) in 2024 and link and match with the world of work with mark achievement 66.16% (category is). This is also supported by the results of an interview with a representative from the business and industrial world (Dudika), Mrs. Ardina, a junior administrative staff member at PT PLN UP3 Grobogan, regarding the competencies of vocational school graduates, stating that:

“Industry owns standard competence certain in recruiting employees and vocational school graduates have not to fulfill fully criteria required competencies in accordance need place Work, especially for competence manage petty cash still not enough thorough in classification account”.

The researcher when observed the beginning of class XI MPLB SMK Asta Mitra Purwodadi on the material petty cash management that student are given the task of discussing, participants were involved in the discussion not yet all active and did not dare to express their opinions. Participants also still have difficulty in learning material petty cash management, so the result in results assessment formative participant students is still low as much as 50%. In addition, the module the teaching used by students has not facilitated students to develop competency skills that can help participants educate and learn the material. On the other hand, the compilation teaching module by teachers has not been integrated with the competencies that must be achieved for the vocational school education level, namely KKNi at level 2.

One solution to solve this problem is to develop a KKNi-based teaching module that can improve students' skill competency. The KKNi-based teaching module contains a contextual learning implementation plan and is by the KKNi level 2 scheme and competency unit as a guideline so that students' skill competency can solve real-life problems according to Dudika's needs (Business World and Industrial Work World). For students at the Office Management and Business Services Vocational School level, the aspects contained in the KKNi-based teaching module include aspects of knowledge, skills, and attitudes that have been developed by integrating KKNi as a basis for developing the competency of SMK graduates according to the KKNi level 2 standards needed in the world of work. The subject matter of the study must be aligned with the background knowledge and the demands of job opportunities (Tolinggi, 2020). Suryanto, E., Oktarina, N., and Tusyanah (2024) stated that lecturers need to design an interactive learning environment by considering student characteristics.

The objectives of the development research to be carried out include: Knowing the teaching modules that have been applied so far on the material of Petty Cash Management for class XI MPLB at SMK Asta Mitra Purwodadi, developing teaching modules based on KKNi on the material of Petty Cash Management for class XI MPLB at SMK Asta Mitra

Purwodadi, and producing the feasibility of teaching modules based on KKNi on the material of Petty Cash Management for class XI MPLB at SMK Asta Mitra Purwodadi.

METHODS

Research methods This is a study known for development with R&D (Research and Development), the products produced in the form of KKNi-based teaching modules on the material petty cash management for increase student competency skills. The research design used according to Thiagarajan in Sugiyono (2019) is a 4-D development model consisting of defining, designing, developing, and disseminating. The first stage is defined as stage analysis needs. The second stage, Design is preparing framework conceptual models and tools for learning. The third stage, namely stage development involves validation testing or evaluating eligibility KKNi based teaching modules. The disseminated stage, namely implementation on target indeed called subject study.

Data sources used in the study This namely qualitative data in the form of suggestions from the validator on the sheet validation KKNi and quantitative data-based teaching modules in the form of obtaining from score validator assessment and feedback participant educate to product KKNi -based teaching modules developed. Subject study This is class XI MPLB at SMK Astra Mitra Purwodadi as many as 80 participants were educated.

Trial design the product used, refers to the purpose study This is a method experiment quasi-experiment with the design of an equivalent Control Group Pre-Test Design. Data collection techniques used that is interviews, questionnaires, and observations. Instruments data collection used that is instrument validation experts and instrument response students. Data analysis techniques in the form of descriptive quantitative and qualitative for test validity, practicality, and effectiveness of -based teaching module. Effectiveness Data Analysis Techniques product with normality test, homogeneity test, and t-test. Level of effectiveness measured teaching module use gain-test. The gain-test data analysis technique was carried out with count gain value for know improvement participant skill competency education.

RESULT AND DISCUSSION

The research results discussed in the study Cover the implementation of teaching modules that have been used on materials for petty cash management class XI MPLB at SMK Asta Mitra Purwodadi, development of KKNi-based teaching modules on petty cash management material for class XI MPLB at SMK Asta Mitra Purwodadi, and the feasibility of KKNi- based teaching modules on petty cash management material for class XI MPLB at SMK Asta Mitra Purwodadi. The KKNi-based teaching module developed takes elements in Phase F of the material petty cash management. Settlement studies related to cases with material petty cash management need skills analysis, reasoning, and

evaluation. Competence is part of *competency skills* that must be taken to study and solve related issues with petty cash material.

Implementation of Teaching Modules So Far on Petty Cash Management Material for Class XI MPLB at SMK Asta Mitra Purwodadi

The implementation of the teaching module on Petty Cash Management for Grade XI MPLB at SMK Asta Mitra Purwodadi, which has been used by the MPLB teachers at SMK Asta Mitra Purwodadi, has not yet been integrated with the competency units required in the occupational certification scheme for office administrative staff at KKNi Level 2 for the vocational education level in the Office Management and Business Services expertise program. This is supported by the results of an interview related petty cash teaching module that has been used and the conditions of the learning process by the Head of the Expertise Program and a Management teacher Office and Services Business SMK Asta Mitra Purwodadi namely Mr. Sriyadi state that:

“Petty cash teaching module that has been used Not yet by the KKNi which is better customized to the needs of the industry. Participants are also not enough enthusiastic about learning the material petty cash management is taught, as can be seen from the list of values participants its value is Still classified as low. This shows a lack of attitude to want to know and think critically participant educate in learning ”.

This matter is also supported by the results interview with a supportive MPLB teacher of material petty cash management namely Mrs. Nunik Ferawati related to teaching modules that have been used to put forward that:

"The teaching module is compiled referring to the book grip in school and not yet understand related to KKNi”

Based on the results interview with Mrs. Nunik as a supervising teacher, he compiled teaching modules used with a reference book handle. Aspect cognitive and psychomotor participant educate also still low as can be seen from the list of values attached. He also does not understand related to KKNi, so the teaching modules that have been used are Not yet integrated with KKNi.

The teaching module that has been used Still has several components that are not yet integrated with KKNi and do not yet cover aspects of participant *skill competency* education. Core components of the objectives learning used during this are in class XI MPLB SMK Asta Mitra Purwodadi that is participant educated capable do petty cash fund recording fund system no fixed (fluctuating), where only do petty cash fund recording only on purpose learning said and not yet seen procedure / steps its recording. Thus, the purpose of learning in the teaching module can be integrated with KKNi becoming among participants can identify banking products according to their needs write the transaction to be carried out clearly on the form as needed, and participants can record transactions that have been carried out in the bookkeeping by SOUP with honest, thorough and careful.

The learning model used during This is the *problem-based learning* (PBL) model, Objective learning should use a learning model *project-based learning* (PjBL). Questions

lighter inside the teaching module are not yet shown by contextual (experience) real and life daily). Worksheet participant education used still still-shaped question description, which did not yet show contextual issues by proof transactions in life every day. Observation sheet participant education and sheet rubric evaluation do not yet show indicator achievement competence in accordance objective learning in a way detailed. Action carries on learning in the form of enrichment and remedial not yet seen inside the teaching module. Reflection learning from participant students and teachers, glossary, and bibliography are also not yet available listed in teaching modules used during this.

Development of KKNI-Based Teaching Modules on Petty Cash Management Material for Class XI MPLB at SMK Asta Mitra Purwodadi

Development-based teaching modules in research This uses the 4D development model. One of the objective studies is to produce KKNI-based teaching modules that are valid, practical, and effective on the material petty cash management class XI MPLB at SMK Asta Mitra Purwodadi. The 4D development model includes stage *definition* (definition), *design* (design), *development* (development), and *dissemination* (distribution). This research only to the point development, not until stage distribution, because of limitations on time and cost until stage distribution. This KKNI-based teaching module's features determine objective learning integrated with the KKNI level 2 scheme occupation *office administrative*. Learning nature contextual by experience real in Dudika and life every day. The learning method used is *project-based learning*. Participants were educated and faced with conditions for finishing projects given by the teacher listed on the sheet Work Participant Learn (LKPD).

The validation results in the teaching module (trial) product) is carried out by expert validators material that lecturer from the Department of Economic Education, Universitas Negeri Semarang, and a teacher as deputy principal of SMK Negeri 1 Purwodadi. Assessment sheet-related teaching module material covers 3 aspects that are eligibility content, eligibility presentation, and language suitability. The results of the assessment by the lecturer expert /validator are presented in the table following:

Table 1. Assessment Score Subject Matter Expert Validation

Number Question	Aspect	Validator 1	Validator 2	Average	Category
1	Content Eligibility	3	4	3.5	Very worthy
2		3	4	3.5	Very worthy
3		2	4	3.0	Worthy
4		3	4	3.5	Very worthy
5		3	4	3.5	Very worthy
6		3	4	3.5	Very worthy
7		3	4	3.5	Very worthy
8		3	3	3.0	Worthy
9		3	4	3.5	Very worthy

Number Question	Aspect	Validator 1	Validator 2	Average	Category
10	Eligibility Presentation	3	4	3.5	Very worthy
11		3	3	3.0	Worthy
12		3	3	3.0	Worthy
13		3	2	2.5	Worthy
14		3	2	2.5	Worthy
15	Language Eligibility	3	4	3.5	Very worthy
16		3	4	3.5	Very worthy
17		3	3	3.0	Worthy
18		3	4	3.5	Very worthy

Source: SPSS output (2024)

Based on Table 1 it can be known that the design beginning developed teaching modules stated worthy from aspect eligibility content, presentation, and language with reviewed from the average indicator is 3.25 in the category worthy is in the interval $2.5 \leq V \leq 3.4$. Validation results the teaching module is carried out by expert media validators, namely subject teachers. Indonesian language lessons. Here Table 2 shows an analysis of descriptive validation media experts namely:

Table 2. Descriptive Analysis Results

	N	Minimum	Maximum	Mean	Std. Deviation
Module	20	3.00	4.00	3.60	,50
Validation					
Valid N (listwise)	20				

Source: SPSS output (2024)

Table 3. Validator's revisions /suggestions regarding the based teaching module

No.	Validator Name	Validator's suggestions/ input
1.	JW (A Professor in public university with the expertise of education administration)	1. Stags (syntax) of learning customized with KKNI. 2. Achievements learning (competence) must be measurable.
2.	Emi Nurcahyaningsih, S.Pd., M.Pd.	1. Presentation material should be designed with the appearance of pictures in the form of mapping, questions can be displayed with pictures that will make students active. 2. Directions and maps draft module Not yet There are. 3. Activity learning Not yet show Syntax from the model or strategy used.

No.	Validator Name	Validator's suggestions/ input
		4. Customized in One element uses one learning model/strategy with a block system.
		5. The module is not yet optimal in pushing participants educate increase their <i>competency skills</i> such as participants to educate for increased literacy and numeracy by combining foreign currency.
3.	Indra Hermarita, S.Pd., M.Pd.	KKNI-based teaching modules have in accordance with components, achievement objective learning, activities learning started with observation test diagnostic, LKPD is listed and includes source Study.

Source: SPSS output (2024)

Results of the validity of the questionnaire instrument to the based teaching module for 32 students that the r -value of the r_{xy} table for 32 respondents and a significance of 5% is 0.349. Validity test results in the that if r_{xy} positive result and r_{xy} result $> r_{xy}$ table, then the item or variable is valid, r_{xy} result is not positive and r_{xy} result $< r_{xy}$ table, then the item or variable is invalid, and the r_{xy} value can be seen in the Pearson Correlation row. Based on the Validity test results pearson correlation that 20 grains question questionnaire r_{xy} result > 0.349 , then the grain questions the declared valid. Reliability test results instrument questionnaire response participant educate to KKNI- based teaching module that the Cronbach alpha value = 0.950 is in the excellent category. Limited testing was conducted in class XI MPLB 2 SMK Asta Mitra Purwodadi with 32 students. Limited testing data were in the form of pretest and posttest results of students using KKNI-based teaching modules. The average gain value in the trial class was 0.29, which is low, as shown in the following Table 4.

Table 4. Pretest and posttest gain values

	Pre-test	Post-test	Gains
Σ	2330.00	2600.00	9.23
Average	72.81	81.25	0.29
		Category	Low

Source: SPSS output (2024)

Table 5. Tests of Normality

Kolmogorov-Smirnov ^a				Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Pre-test	,241	32	,000	,886	32	,003
Post-test	,228	32	,000	,831	32	,000

Source: SPSS output (2024)

The normality test used in this study is the Kolmogorov-Smirnov Test. The pre-test of the trial class has a sig value = 0.000 ($p < 0.05$) so the data is not normal. The paired t-test can be performed if the data is normally distributed. However, if the normal requirements are not met, a non-parametric test is performed, namely the Wilcoxon test, pretest, and posttest have a sig value = 0.000 ($p < 0.05$) so that the data between the pretest and posttest is different.

Improvement participant skill competency education obtained from results answer moment do question pretest and score posttest obtained from results answer participant educate. The result of data improvement participant skill competency education can be presented in the Table 6 following:

Table 6. Pretest and posttest results

Class	Stages	Amount mark	Average
Control Class (XI MPLB 3)	pretest	1820	62.76
	posttest	2140	73.79
Experimental Class (XI MPLB 1)	pretest	1750	70.00
	posttest	2320	92.80

Source: SPSS output (2024)

Based on the results pretest and posttest participants were educated in Table 6 in class control obtained a mark average pretest of 62.76 and posttest of 73.79 from 29 participants educated class XI MPLB 3 SMK Asta Mitra Purwodadi. The results of the grades in the class experiment mark average pretest 70 and posttest 92.80 from 25 participants studied in class XI MPLB 1 SMK Asta Mitra Purwodadi.

Effectiveness KKNi-based teaching module for improvement participant skill competency educate with using the difference test. Indicators of success in the study This is an existing difference between participant skill competency education between class control and class experiments on values posttest. Analysis with independent difference test conducted with SPSS 21 with results as following:

Table 7. Tests of Normality

Class	Kolmogorov-Smirnov ^a			Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Control	,254	29	,000	,908	29	,015
Experiment	,300	25	,000	,890	25	,011
Control	,195	29	,006	,937	29	,082
Experiment	,324	25	,000	,742	25	,000

Source: SPSS output (2024)

Based on the results in Table 7 above-obtained sig 0.000 <0.05 than can be concluded that the research data the improvement in different skill competencies between class control and class experiment, meaning product KKNI-based teaching modules developed proven effectively used in material petty cash management.

A normalized N-Gain (N-Gain) test was performed to determine the improvement of participant skill competency education class experiment namely XI MPLB 1 after treatment, the calculation normalized gain score (N-Gain) can be explained in the calculation following:

$$\begin{aligned} \text{N-Gain} &= \frac{\text{Skor Posttest} - \text{Skor Pretest}}{100 - \text{skor pretest}} \\ \text{N-Gain} &= \frac{92,80 - 70,00}{100 - 70,00} \\ \text{N-Gain} &= 0.76 \end{aligned}$$

Based on the results the above calculation obtained an N-Gain score for improvement in participant skill competency education in the class experiment (XI MPLB 1) on the results pretest and posttest obtained a score of 0.76 with category tall.

Eligibility of KKNI-Based Teaching Modules

Components contained inside teaching modules that have been used are not yet integrated with KKNI, namely in the components objective learning Not yet seen criteria show work contained in KKNI elements. Learning model components Still use problem-based learning (PBL). Component sheet Work participant education (LKPD) used Still shaped question narrative/description, where not yet show contextual issues by proof transactions in life daily or experience real. Component Observation sheet participant educate, and sheet rubric evaluation Not yet show indicator achievement competence according to objective learning carried out by participants educate in a way detailed. Component acts carry on learning which is in the form of enrichment and remedial not yet seen inside the teaching module. Reflection learning from participant students and teachers, glossary, and bibliography are also not yet available listed in teaching modules used during This. Components teaching modules according to Mager in Kosasih (2022), include a description of the material taught in a way comprehensive; the purpose of learning that will be achieved; benefits and relevance; example competencies that will be owned after learning module; teaching material; exercises, assignments, studies case; and reflection and feedback back. According to Kosasih (2022) the criteria for good teaching modules, including modules must interesting interest and motivate participants to educate, for example with a load of attractive illustrations and appropriate language with a level of cognition the; module must avoid vague concepts and angles clear view; and module must value differences participants ' details educate the user.

Research conducted by Hastari (2015) Development of Basic Competency Modules Explaining the Storage and Retrieval of Letters/Documents Based on a Scientific Approach in Class XA P 2 S MK Negeri 1 Ngawi obtained an average of 82.8% with

criteria very decent assessment. Based on the study by Yudha and Rahmi (2023), the completeness of the components of the SMA Negeri 1 Puri Mojokerto teaching module falls into the appropriate category and gets an overall percentage of 83%. This research is also relevant to research Rizkita's (2016), development of teaching materials in the form of the module as Supporters learning scientific on the material finance company service using the 4D model according to Thiagarajan with results research is very worthy obtained average percentage of 93.3% so that can be used as teaching materials.

Yulian, VN (2018) stated that teaching material is a type of material to assists educators in carrying out teaching and learning activities in class to increase student interest. Harahap (2022) stated that modules are teaching materials that are systematically arranged in a language that is easy for students to understand according to their level of knowledge and age so that they can learn independently with minimal assistance or guidance from educators. Modules are also contextual so that students can more easily relate the material they are studying to everyday life, both in the family environment, school environment, community environment, and even the country to find the meaning of learning in the material for their lives. Rahmani (2021) One of the easiest teaching materials made by teachers is teaching material in printed form. In the process of developing teaching materials, teachers also should not just make them. Everything must be made systematically. The contents of teaching materials must also interest students or readers.

The KKNI-based teaching module contains a contextual lesson plan that aligns with the scheme and competency units of KKNI Level 2 as a guide. This ensures that students' skill competencies are developed in solving real-life problems to the needs of the business and industrial world. For participants educate Management Vocational School Level Office and Services Business, aspects that exist in KKNI-based teaching modules which include aspect knowledge, skills, and attitudes that have been developed referring to the Independent Curriculum with integrating KKNI as base development competence vocational school graduates according to KKNI level 2 standards required in the world of work. Grabinski (2020) The effectiveness of learning is understood as achieving learning outcomes set out in the course outline, according to the National Qualifications Framework or the course syllabus, which, in reality, means student test scores". One of the criteria of a qualified learning source is validity. It is the extent to which a measuring instrument carefully and precisely performs its function as a measuring instrument" (Syahropi, 2019).

The Education Curriculum in Indonesia is compiled and designed based on the Indonesian National Qualification Framework (KKNI). KKNI is a standard for educational units in designing a curriculum that is relevant to the needs of society and produces graduates who have the skills and knowledge needed by the world of work. Development of a KKNI-based teaching module to increase participant skill competency Because it teaches contextual materials so that participants get draft petty cash management and examples studies related cases direct to live in the industrial world. Handouts have been developed based on KKNI as indicated on the learning outcomes and learning objectives (Sari, S.Y. and Afrizon, R., 2018). In addition, contextual teaching materials can build new

knowledge for finishing problems in life and real aspects available in the teaching module. The knowledge and skills contained in the KKNI-based teaching module are directed at increasing participant skill competency education. Meanwhile, the aspect attitude directed to form profile Pancasila student participants educate, so that expected with increasing results Study participant educate through improvement skill competency and profile Pancasila students participants educate, quality source Power Indonesian people also increased for face competition in various the sector is increasingly strict. Previous research that supports this study is what Saputro (2022) did, a good learning module is, of course, one that is by KKNI and industrial competencies.

CONCLUSION

The development of KKNI-based teaching modules on Small Cash Management material for class XI MPLB at SMK Asta Mitra Purwodadi to improve student competency skills can be used as a reference for teachers and principals in developing teaching materials that are in accordance with the needs of society and / or industry as a provision for students in facing global competition and challenges in the world of work. Learning materials developed in KKNI-based teaching modules on petty cash management material to improve student competency skills are packaged contextually and comprehensively. Contextually developed learning materials are expected to be used as a reference for teachers in carrying out office management learning that is interesting and directly related to the daily lives of students. he KKNI-based teaching module developed can be used by teachers who teach Office Management and Business Services subjects to measure other aspects of students and other learning outcomes. The development of teaching modules based on KKNI is expected to be further developed with different materials and expertise programmes in accordance with KKNI.

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