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Development of Project-Based Digital Learning Modules for Legal Dutch Courses

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Abstract

The Dutch Law course is a compulsory subject in the law study program, but students who get a score of 80, not all can pronounce and understand legal terms that use legal Dutch. This study aims to create project-based learning (PjBL) using design and learning materials from digital modules so that students are accustomed to pronouncing and reading legal terms in legal Dutch. Digital module development uses 4-D research and development methods, namely: define, design, develop, and disseminate, data collection, using questionnaires, and expert validation. The limitations of the study, the respondents were 50 students who took Dutch law courses. Analysis using mix-method methodology. Learning effectiveness is collected through the completion of all learning activities on digital modules. Findings on the effectiveness aspect with learning completeness indicators reaching a score of 92.78% are said to be completed, student activities reaching a score of 87.63% are in the active category, student responses to the use of digital modules reach a value of 3 meaning a positive response. The practicality of digital modules implementing the overall project-based learning syntax is 97.65% included in the excellent category. Lecturer activities in learning by applying project-based learning strategies resulted in a score of 85.06% in the active category. The study results found that learning PjBL for the Dutch law course was proven to make students active, and students could pronounce and understand legal terms correctly.

Keywords: *Project based learning, Dutch law, Spada Indonesia*

INTRODUCTION

Project Based Learning is a learning method that uses projects/activities to solve real and complex problems. Students explore, formulate questions, multiply information, conduct assessments, interpret, synthesize, and analyze to produce various forms of learning outcomes. Project-based learning is the first step and integrating new knowledge based on experience in real activities. The role of lecturers as companions, motivators, and facilitators for students

Project-Based Learning (PjBL) has gained wide recognition as one of the innovative and effective learning approaches in the context of higher education. This method encourages active participation and student involvement in solving real problems, utilizes practical and theoretical skills, and encourages an in-depth understanding of learning materials. In the context of Dutch law courses at UNAS, PjBL offers the potential to improve Dutch language mastery and understanding of the field of law holistically and thoroughly.

The Dutch law course is compulsory in the legal study program whose purpose is to educate and train students to be able to understand the basics of Dutch, speak good and correct Dutch, and speak a little in Balanda, especially by understanding legal terms in the use of Dutch (Graaf, 2023). The legal system is dominated by two legal systems, namely *Civil* Law in the form of a law book, countries are France, Germany, the Netherlands, and their colonies (Indonesia, South Korea, and

others) and *the Common Law* legal system whose laws come from judges' decisions, and customary law (Sobari, 2023). Countries with a *Civil Law* system have colonies (the Dutch colonized Indonesia), so of course the colonies follow the laws of the colonizing countries, so, the laws brought by the Dutch, are Dutch laws that must be learned (Samoy, Borucki and Keirse, 2019).

Therefore, students' ability to communicate well in Dutch is very important, especially for those who are involved in law, judiciary, or legal translation studies. PjBL offers an interactive and contextual way to strengthen Dutch language skills and expose students to relevant and in-depth situations related to legal practice.

The results of the study based on data on the scores of students who had taken the Dutch Law course from 2018 to 2022 produced the following findings: the average score of students for the Dutch Law course was 80 which means very good grades, but the observations found that some students who scored 80 were not all able to communicate and were able to read legal documents using legal Dutch. When students are given reading tests, some still mispronounce. Because the value of the Dutch law course is obtained through midterm and end-semester written exams so that students only master concepts and like to memorize words or sentences, lacking in implementing them, namely communicating and reading legal documents, the learning materials that exist so far are printed books that only contain Dutch theory, so they are not contextual in the field of law, do not train students to speak.

Conditions like this if left unchecked will have an impact on the low ability to pronounce or understand legal documents which will be fatal when students work in the legal field. Efforts to overcome this problem are carried out by creating learning materials in the form of digital learning modules that are stored on the Indonesian Spada page. The learning module, developed project-based, is an innovative module that can encourage students to be actively involved and think creatively in digging, finding, and solving problems on their own so that they can understand the material they are learning. Student assignments start from the concept of learning languages, pronunciation, speaking in court, looking for legal documents, and making legal documents using legal Dutch.

This study aims to create project-based learning (PjBL) using the design and learning materials of digital modules so that students are accustomed to pronouncing and reading legal terms in legal Dutch, as well as evaluating the effectiveness of PjBL-based digital modules in Dutch law courses and their impact on students (Khairani *et al.*, 2022).

LITERATURE REVIEW

In the learning process that takes place in the classroom, there needs to be learning that builds cooperation between friends to increase understanding of learning material. The theories underlying the emergence of project-based learning are cognitive theory and constructivism theory. Jean Piaget and Lev Vygotsky (Kustandi, 2016) were figures in the development of the concept of constructivism. It is on this concept of constructivism that the foundation of project-based learning is laid. Piaget posited that learners of all ages are actively engaged in the acquisition of information, building their knowledge. Knowledge is not static, but constantly grows and changes as learners encounter new experiences that force them to build and modify their initial knowledge.

Project-based learning not only examines the relationship between theoretical and practical information but also motivates students to reflect on what they learn in learning a real project. students can work in reality, as if there is a real world that can produce products realistically (Natalia and Jalinus, 2021; Triantoro, 2022). This underlies a systematic learning process and learning how to manage the class well. Project-based learning can also increase learners' confidence, motivation to learn, and creative ability, (Mora *et al.*, 2020) state that project-based learning is a learning model that involves students in the knowledge transfer stage.

Based on previous research on the effectiveness of the PjBL method that has been carried out, it was found that the PjBL method is effective in making students active and fulfilling the characteristics of 21st-century learning (Santos and Serpa, 2020; Citra and Dedi, 2021).

The project-based learning method is a learning method that provides opportunities for teachers to manage learning in the classroom by involving project work (Perez and Rubio, 2020). Project work contains complex tasks based on problems given to students as a first step in collecting and integrating new knowledge based on their experience in real activities, and requires students to carry out design activities, carry out investigation or investigation activities, solve problems, make decisions, and provide opportunities for students to work independently or in groups (Jusuf, 2021).

Project-based learning has 5 steps, namely, the problem formulation step, the step of analyzing learning problems and problems, the discovery and reporting step, the step of presenting solutions and reflection, and the step of summarizing, integrating, and evaluating (Suseno *et al.*, 2022). Project-based learning can be used to improve the learning system and improve students' problem-solving skills.

RESEARCH METHODOLOGY

This research uses the *Research and Development* method. Research and development methods are research methods used to produce certain products and test the effectiveness of those products (Sugiyono, 2009). The research and development used is a 4-D development model (four-D models) (Sulistiyono, 2022). The development model consists of four stages of development, namely: define, design, develop, and disseminate.

Figure 1. 4-D Model

Here is the description of the 4-D model stage:

1. The define stage, helps in determining and explaining needs and collecting information related to things to be developed in the product to be made. Learning planning is required in the application of project-based learning. The preparation of learning planning stages includes the preparation of semester learning plans (RPS), selection of teaching media, learning resources, evaluation tools, and learning scenarios.
2. Design stage, helps determine the design to be applied. At this stage, media selection, format selection, and preliminary design are made.
3. The development stage, aims to produce products. In this stage, the product that has been made must pass several stages of improvement from experts and be tested by users. The developer test stage is carried out if the product manufacturing process has been completed and is ready to be tested for validity by experts. The testing process is carried out in stages, starting from product validation tests by experts, trials on an individual scale, trials in small groups, and finally trials in large groups. If the product is proven to be invalid or invalid when tested by experts, this test will be repeated to ensure results are in line with expectations.
4. Disseminate stage, at this stage, the product can be disseminated and introduced to the wider community beyond the scope of development itself.

In this development research, the subjects for the module development trial are 50 students of the National University Law Study Program class of 2023 who take legal Dutch courses. The data obtained is in the form of quantitative data and qualitative data. Quantitative data is in the

form of scores obtained through validation sheets, observation sheets, and student response questionnaires, while qualitative data is in the form of notes, and comments based on expert assessments.

The validity test aims to ensure that the instrument used can be the right tool to collect the necessary data. In this study, the validity test to be used is theoretical, namely validity based on expert considerations. Reliability tests are performed after instrument validity tests are performed. After the research instrument is validated by instrument experts, then the instruments and learning materials are given to the resource persons, namely experts and students. The reliability of the test instrument is obtained by *a single test reliability.*

FINDINGS AND DISCUSSION

1) The define stage, the prototype produced in this stage is a project-based learning digital module as in Table 1 below

Table 1. Instrument Validation of Learning Modules

No.	Material name	Information
1	Dutch law book	As a reference for learning
2	Learning Management system	As a place for SCL students
3	RPS	Student reference learning
4	Pre-test and Post-test questions	Measuring learning effectiveness
5	Learning material (ppt/pdf, flipbook)	Learning material summary form
6	Learning Video	Learning materials
7	Formative evaluation	Measuring learning outcomes
8	Group project question	Measuring the effectiveness of project-based learning

2) The design stage, the learning flow in the learning management system in Indonesia, is designed as shown in the following 2.
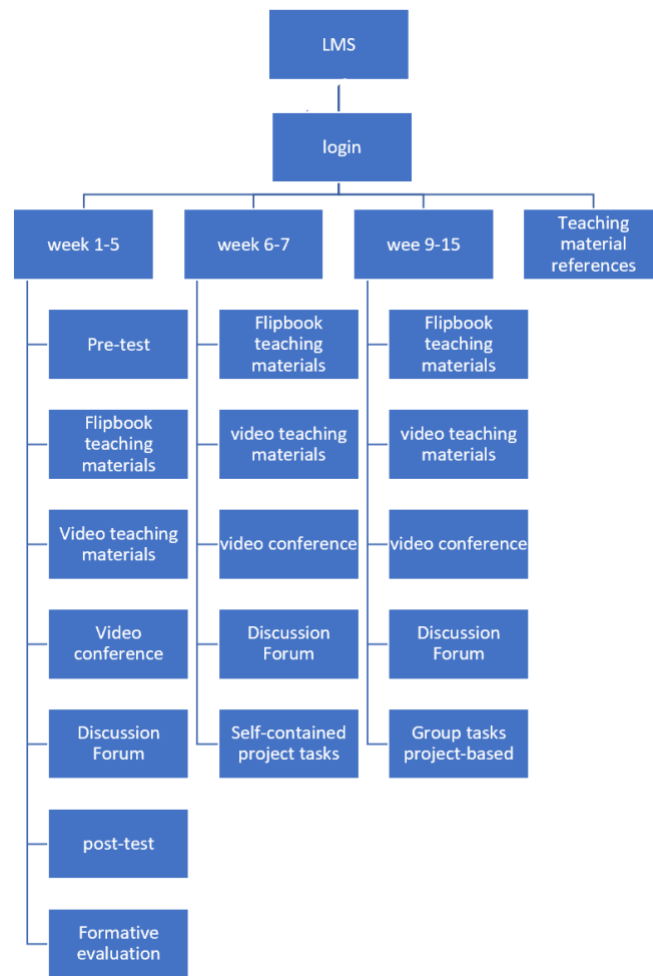
Figure 2. Menu hierarchy on LMS

Figure 2, is a design of the contents of the LMS, this design is needed as a guide to make learning hijacking consisting of 15 meetings. Design round design that contains project-based as shown in figure 3 below
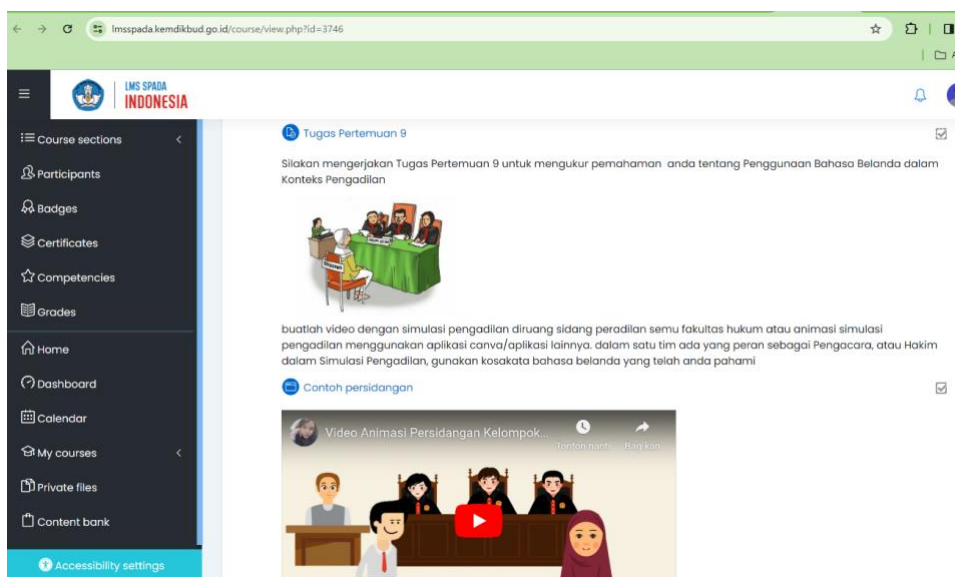

Figure 3. LMS Spada Indonesia

Figure 3 is a display of learning at the 9th meeting, students began to do group assignments, starting from making videos of events in the moot court laboratory room or making animated videos of events in court. The purpose of this assignment is to train good and correct pronunciation, then the assignment is in the form of legal case analysis which ends with a group presentation.

3) The development stage, including validation to determine the level of validity of the developed instrument and conducting trials to determine the level of practicality and effectiveness of the learning module.

Table 2. Average Score of Project-Based Learning Module Validation Instrument

No	Instrument	Average score
1	RPS	4
2	Module implementation sheet	3.5
3	Lecturer activity observation sheet	3
4	Learning material mastery test	3
5	Student response questionnaire	3
	Average score	3.3

Based on Table 2, the results of validation by instrument experts, resulting in an average score of all aspects are 3.3 and the criteria set by the instrument meet validity. In the next stage, field trials were carried out involving two observers, namely peers to observe the implementation of modules, lecturer, and student activities in learning. This trial aims to determine the level of practicality and effectiveness of the resulting module. The practicality of modules with aspects of the implementation of the entire project-based learning syntax is 97.65% included in the very good category. Lecturer activities in learning by implementing project-based learning strategies resulted in a score of 85.06% included in the active category. Lecturer activity is one of the indicators of module practicality, considering that no matter how good and good the module is arranged, if it cannot be used properly in learning activities, then the module is not practical.

Based on observations, it appears that the lecturers have been able to carry out the project-based learning syntax well so that the modules developed meet practical aspects. The effectiveness aspect of the module with learning completeness indicators reached 92.78% complete. Student responses reached a score of 87.63% in the active category. Student response to the use of learning materials reaching a score of 3 means that overall students give a positive response. Referring to these results, it can be concluded that the learning module meets the effective requirements. Student activity scores based on observations in activities using project-based learning modules are shown in Table 3.

Table 3. Student Activity Scores at the Stage of Learning Activities

No	Stage of activity	Activity score	Category
1	Project tasks	87.61%	Excellent
2	Multiplier information	87%	Excellent
3	Plan project completion	87.88%	Excellent
4	Discuss projects	89.97%	Excellent
5	Studying theoretical concepts	89.88%	Excellent
6	Test answers	89.87%	Excellent
7	Carry out activities	86.93%	Excellent
8	Presenting the results of activities	88.65%	Excellent
9	Conduct activity evaluations	85.20%	Excellent

In table 3 above, the average results of activities carried out by students are 88.11% included in the very good category. This means that learning activities designed Excellent.

4) The dissemination stage, a project-based learning module for Dutch law courses, has been proven to meet all aspects of validity, and effectiveness.

Through this learning model, students are given space and opportunities to develop their thinking and creativity in solving problems. In Project-based learning, the role of modules is needed as a guide for students and lecturers in the learning process.

CONCLUSIONS AND FURTHER RESEARCH

The resulted of expert validation of the project-based learning module of the Dutch Law course, the average score of all aspects is 3.3. The practicality of the module in the aspect of implementation resulted in an average score of 97.65% in the very good category. Lecturer activities in learning by implementing project-based learning strategies resulted in a score of 85.06% in the active category. The effectiveness aspect of the module with learning completeness indicators reached 92.78% complete. Student responses reached a score of 87.63% in the active category. Student response to the use of learning materials reaching a score of 3 means that overall students give a positive response. Referring to these resulted, it can be concluded that the learning module meets the effective requirements.

Through this research, the potential of PjBL as a learning method can strengthened the Dutch language skills and legal understanding of students at the National University. This research also sought to contribute on a practical level to teachers in improving the quality of teaching and improving the learning. PjBL was proven to improve student performance in learning. The results of the study found that learning PjBL for the Dutch law course was proven to make students active, and students pronounced and understood legal terms correctly.

Research Limitations:

First, the sample size may not include all variations in the student population. Second, the use of certain research methods can limit the generalizability of results.

Recommendations for Further Research:

First, More Representative-Expand the sample size, second Advanced Module Development.

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