



## **Developing English for Specific Purposes Material: English for Wetlands at Lambung Mangkurat University**

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### **Abstract**

Referring to Lambung Mangkurat University's (ULM) policy to become the center of Asia-Pacific wetland development in 2027, one of the efforts made is to improve the ability of ULM students, especially in English language skills related to wetlands. In this regard, this research was conducted to develop online English-based materials on Wetlands. This research aims to meet the needs of ULM students and assist ULM lecturers in teaching courses related to wetlands. The development method used in the study was adapted from Dick and Carey (2001), which includes (1) needs analysis, (2) material development, (3) validation and revision. The results showed that the online-based English for Wetlands material that was developed met the criteria of validity, practicality, and effectiveness. With the development of this material, it is hoped that lecturers and students can carry out independent learning related to wetlands. Therefore, this study hopefully could help students gain autonomous strategies for evaluating the credibility of online information and encourage student-centered learning.

Keywords: ESP; online-based materials; Wetlands

### **Introduction**

English is considered a compulsory general basic course at the university level, which needs to be taken by every first-year student at Lambung Mangkurat University (ULM) involving all majors or departments in the ULM. Referring to university policy, to enable ULM to become the center of Asia-Pacific wetlands development in 2027, all students in this university must have better English proficiency especially related to wetlands. ULM makes an effort to promote the awareness of optimizing the wetlands by integrating knowledge related to wetlands with the subjects taught in university. It is considered an important decision regarding the change of

curriculum that obliges all departments in faculty need to teach content about wetlands in one of the required subjects. Every major or department subject related to wetlands takes the same average credit of 2 SKS. Since it is a brand-new subject, the lecturer cannot avoid the challenges and obstacles when teaching this subject. It is enjoyable and dynamic teaching and learning process for both teachers and students (Hidayat and Krismanti, 2021). Then, it needs extra efforts for the lecturers who were previously not supplemented with fine examples of teaching wetlands materials. In reality, the students also have low motivation when learning the subject related to wetlands because they still have not yet found the real usefulness that supports their field and the lack of attraction on both materials taught, and media used when teaching wetlands subject. It will lead to the failure to increase students' mastery, especially wetland knowledge.

The initial research conducted in 2009 by Trisyanti developed the ESP material in the TEFL context. Then, it was followed by several researchers who developed the material of ESP based on the audience's needs. However, this study developed the materials based on the surrounding environment.

This study is intended to develop online wetland materials for English for Specific Purposes students to help students develop effective online learning related to wetlands. ESP needs a specific context, and the media plays an important role in this current situation in teaching and learning (Jafari Pazoki & Alemi, 2019, Pitura, 2021). Seeing the importance of achieving the teaching goals, learning process, and lack of suitable wetlands materials as the sources of learning and students' needs of interesting wetlands materials; therefore, this study is intended to incorporate technology in wetland subject classes not only to improve students' academic performance but also to create variations in learning activities. In addition, it is recommended for students to access material not only through the book but also online (Yang, 2015:15).

Using online wetland materials gives an alternative solution to overcome the problems in teaching wetlands for English for Specific Purposes students as it has many advantages for both students and lecturers. In addition, it provides opportunities for students to practice their skills in English, such as listening, speaking, reading, and writing outside the classroom. Using online wetland materials is also necessary to help students gain autonomous strategies for evaluating the credibility

of online information and encourage a student-centered learning approach since it requires students to do most of the project work online. This study aims to develop online wetland materials that meet the needs of Lambung Mangkurat University students, especially students of the Faculty of Teacher Training and Education, to help lecturers when teaching subjects related to wetlands. The study addresses the following research question namely how does the development of the English online-based material of Wetlands contents for EFL students?

### **Research Methodology**

This study employs a research and development (R&D) design to develop online wetland materials for English for Specific Purposes students of FKIP ULM. The researcher adopts Dick and Carey (2001: 2-3, cited in Borg et al., 2007:589) model due to the accessibility and feasibility. The procedure of this study involves (1) conducting instructional analysis, (2) developing the instructional materials, (3) designing and conducting formative evaluation, (4) revising instructional materials, and (5) conducting summative evaluation or product try-out.

The subject of the study was 210 students of the Faculty of Teacher Training and Education of Lambung Mangkurat University. A need analysis survey was conducted to 210 students and English for Specific Purposes lecturers of some majors in FKIP ULM. The expert validators whose expertise on online learning materials were also needed to validate the product.

The instruments used to collect data were questionnaires and experts' judgment. The initial questionnaires were distributed to 210 students of FKIP ULM to find out what they need and what they want to learn when learning Wetlands subjects. The other questionnaires were distributed to the students when the product had been made and used by them. To evaluate whether the product was eligible to use and met their needs. Furthermore, experts' judgment was also needed to check the validity of the product. A checklist was provided to evaluate the product's validity before the try-out to obtain the expert validation.

The students' questionnaires were analyzed quantitatively using frequency and percentage to analyze the data. The highest percentage is considered as the representation of the students' condition. The second data came from the expert's

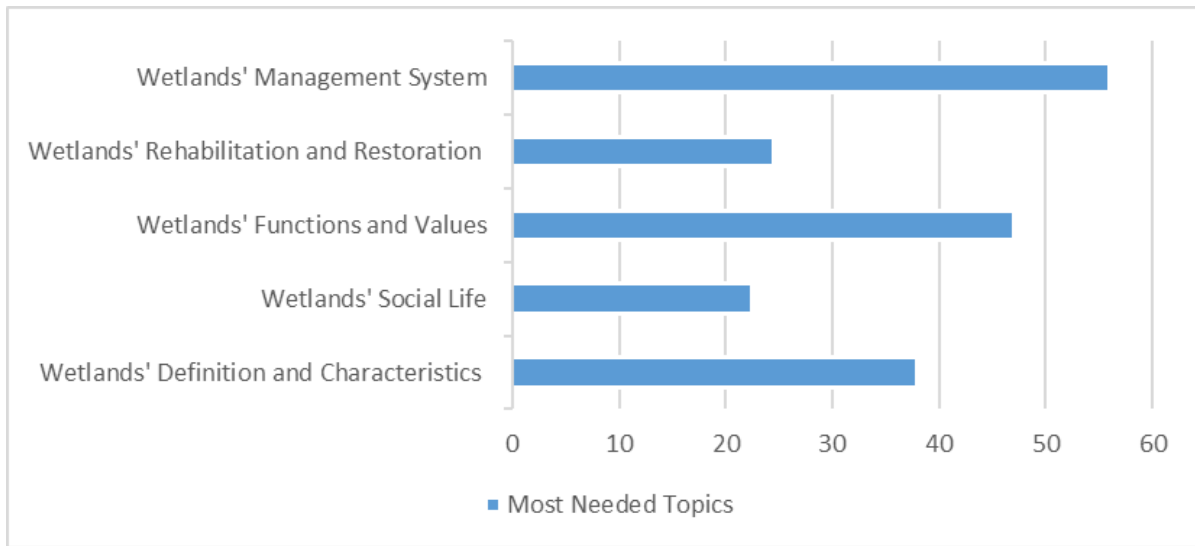
judgment on the presentation of the materials. The result of the expert validation is analyzed quantitatively through descriptive quantitative.

## **Findings and Discussion**

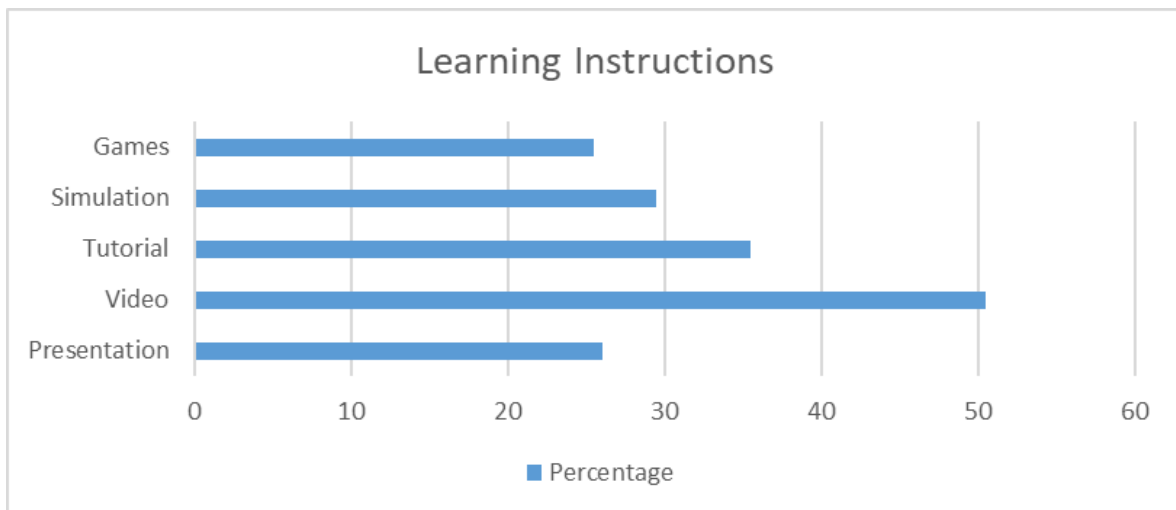
### **Findings**

A needs analysis was conducted to determine the needs of non-English department students at FKIP ULM related to wetlands materials. The analysis was done to get specific information about wetlands materials at the university, the most necessary topics, and the learning media to learn about wetlands. The researchers distributed questionnaires for the 210 students from 21 departments. The results of questionnaires were used as the basis for developing the product.

From the results of needs analysis, it is shown that most of the students stated that materials related to wetlands are rarely found or provided by the university; on the contrary, Wetlands subject is the university subject served as the signature subject offered by Universitas Lambung Mangkurat. Furthermore, the students had listed some topics they wanted to learn about wetlands. Among 19 topics offered, the students chose the five needed topics for their study: wetlands' management system, wetlands' functions and values, wetlands' definitions and characteristics, wetlands' rehabilitation and restoration, followed by wetlands' social life. The rest of the topics were opted for by very few students. The last information obtained from the needs analysis is learning media for studying wetlands. It is agreed by most of the students that they prefer to learn wetlands through online learning, especially which contains more on videos, tutorials, simulation, presentation, and games. The researchers will consider all of those learning instructions in developing the product.



**Picture 1:** The Most Needed Topics for Wetland Materials



**Picture 2:** Learning Instructions Preferred by Students

Some points can be concluded from the need analysis; first, it is important to provide learning materials based on their preferences and needs. Second, it is prominent to develop and design the wetlands materials that can be used online, including various learning instructions. In addition, in developing materials with the aides of visual supporting material (Oksana, 2015). The researchers decided to develop online learning materials related to wetlands on the website based on these points.

### The Result of Product Design

Before developing the product, the researcher designed the product based on the result of needs analysis. In this product design stage, there were two major steps to take. The first step was planning. They were planning the product and making the blueprint. In this stage, the researcher made a plan later used to blueprint the product. The plan was made by defining the topics based on students' preferences from the need analysis results. Thus, the researcher took the result of needs analysis, which involves the wetlands' management system, the wetlands' functions and values, the wetlands' definitions and characteristics, the wetlands' rehabilitation and restoration, and the wetlands' social life. Then, constructing a blueprint of the product was conducted. In the blueprint, the learning topics and learning instructions on online learning are mentioned.

**Table 1:** Blueprint of Product

<b>Learning Topics</b>	<b>Learning Instructions through Website</b>
Wetlands' definitions and characteristics	Presentation and Games
Wetlands' functions and values	Presentation and Videos
Wetlands' rehabilitation and restoration	Videos and Simulation
Wetlands' management system	Tutorial and Presentation

### 3 The Result of Product Development

The result of the development of the product was a set of products in the form of a website (<https://emfarawetlandsmaterials.com/>) containing learning materials about wetlands. There were five topics developed in the online materials: wetland's definitions and characteristics, wetlands' functions and values, wetlands' rehabilitation and restoration, wetlands' management system, and wetland's social life

The development of the product was done through a series of steps. After the blueprint had been made in the product design stage, the materials were developed. The materials related to wetlands were taken from many sources,

including books and online sources, by adopting and adapting. However, to suit the students' level and ability, the researcher modified some of the materials.

The planning of the activities is based on the review on students' need analysis. After finding the materials, the researcher designed how the materials are presented on the website. For the wetlands' functions and values and the wetland's social life, the researchers would present it on presentation and videos. Then, for the topic of wetlands' definition and characteristics, the learning instructions chosen are in the form of presentations and games. Furthermore, wetlands' rehabilitation and restoration are shown through videos and simulation while the wetlands' management system topic is presented using tutorial and presentation.

The next step was designing the product. The main product in this study is the website that contains wetland materials. Therefore, the website contains text and videos, games, and simulation/tutorials. All of them were compiled into a website that covers the website's name, home slide, public information, contact, and gallery. The researchers used some figures and colors to make the website attractive and interesting. Finally, all of the recorded materials were made, they were inserted in the website which the researchers had designed.

### **The Result of Validation by Expert of Media and Wetland Instructional Materials**

After finishing the draft of the product, it was evaluated by the expert of media and wetland instructional materials. The expert of media was given a form to fill in. There were two main aspects to be evaluated. The first aspect is about the feasibility of the content of instructional materials. It includes the scope of the instructional materials, the clarity of the materials, the structure of instructional materials, the relevancy of materials with the student's needs, the clarity of information provided in illustration or videos, the relevancy of exercises or tests with the target competence. The second aspect is teaching, which includes the relevancy between the basic competencies with the standard competence, the clarity of the program title, the clarity of learning instructions, the varieties of learning strategies provided on the website.

The media expert's average score for all judgments was 89.08%, meaning that the media and the wetland instructional materials were feasible to use. The media

expert stated that the product was interesting and easy to operate. However, the writing format, including the font, should be redesigned to make it more attractive and clearer.

## **Final Product**

After the draft was evaluated and revised, the product was completely developed. The product, then, can be produced and presented on the internet. The product functions as online wetland materials for the students of non-English departments in FKIP ULM. The product is in the form of a website, namely Emafara Wetlands Materials (<https://emfarawetlandsmaterials.com/>)

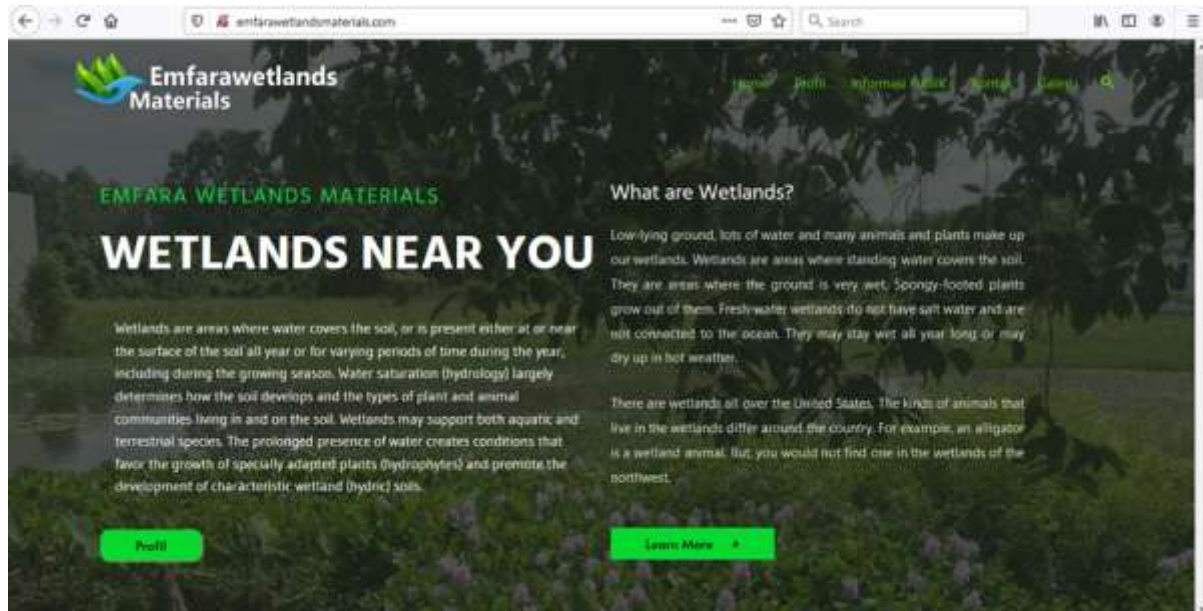
The website contains wetland materials in presentations, games, videos, tutorials, and presentations. Besides, it also includes a contact person and references containing information about the sources of materials. The materials are distributed into five topics: (1) wetlands' definitions and characteristics, (2) wetlands' functions and values, (3) wetlands' rehabilitation and restoration, (4) wetlands' management system, and (5) wetlands' social life.

Each topic of the materials is presented differently based on the relevance between the materials and the learning instruction. For the first topic, wetlands' definition and characteristics, the materials are presented in presentations and games. There are some texts provided, followed by questions and answers. These worksheets could enhance students' creativity, and also, as a fun activity, an effective medium of the teaching process could improve students' skills (Budiarata, 2021). Furthermore, games related to the topic, such as crossword puzzle, is also used to get students' attention to learn and review what they have learned from the texts. Differently, the topics related to wetlands' functions and values and wetlands' social life are shown using presentations and videos. These videos are taken from Youtube since there are a lot of sources related to wetlands already provided in the site. Moreover, wetlands' rehabilitation and restoration topics consist of videos and simulation activities while wetland's management system comprises some activities through tutorial and presentation.

The product is equipped with the home slide containing a brief description about the website itself, stating the name of the website and the purpose of the



website itself. There is also a short explanation about wetlands in general. On the top of the website, there is an option to choose: home, profile, public information, contact, and gallery.



**Picture 3:** The Website of Emfarawetlands Materials

## Discussion

The result of this study is a product of instructional material in the form of online wetland learning materials for English for Specific Purposes students (non-English department) of FKIP ULM. The final product of this study is a website, namely Emafara Wetlands Materials (<https://emfarawetlandsmaterials.com/>), containing wetland materials in the form of presentations, games, videos, tutorials, and presentations.

The product is believed to fulfill the needs found in the need analysis. The product's problems are the lack of wetland materials provided by the university or the lecturers and the need for wetland materials that can be used inside or outside the classroom. Thus, this product is expected to help the lecturers prepare wetland materials.

The preliminary research (conducting need analysis) showed that it is prominent to develop wetland learning materials since the wetland subject is a brand-new subject in Universitas Lambung Mangkurat. In the preliminary research, it

was found that students' availability of instructional materials has not supported the learning process. Based on this, it is necessary to develop a model of instructional materials that can serve as an example for lecturers to develop teaching materials that suit the needs of students.

Next, based on the prototyping phase, is the development of instructional materials. Model of online wetland materials was developed by considering two issues: content and teaching. First, on the content, the online wetland materials developed consists of five topics; (1) wetlands' definitions and characteristics, (2) wetlands' functions and values, (3) wetlands' rehabilitation and restoration, (4) wetlands' management system, and (5) wetlands' social life. Second, the materials were developed considering the appropriate learning instructions such as presentation, videos, tutorial, simulation, and games. Those learning instructions are chosen since they enable students to self-evaluate and reflect on their learning process (Serin, 2011:183).

Furthermore, UMESCO Asia and Pacific Regional Bureau for Education (2004) in the case study of six Asian countries, found that the use of ICT (Information and Communication Technology) tools "helped to improve greater autonomy in learning, stimulate students' sensory and cognitive curiosity, develop life skills, boost self-confidence and facilitate the learning of abstract ideas and theories" (p.129). Furthermore, the language used for the online materials needs to be relevant to students' level and ability. Also, since the online learning materials are developed in the form of website, the materials are furnished with illustrations and some other suitable supporting elements to be interesting wetland materials. The second aspect is teaching, which includes the relevancy between the basic competencies with the standard competence, the clarity of the program title, the clarity of learning instructions, the varieties of learning strategies provided on the website.

The online wetland materials have been designed, it was further validated to obtain a valid material (content and teaching aspects). This is in line with Emzir (2010, p. 273), who argues that validation is the process of product design assessment done by giving a rating based on rational thinking. The online wetland materials were validated to two experts. In this study, the validation is performed by two experts according to their expertise. Based on the validity by experts, online wetland materials developed is a very good category with 90.05% and 88.11% of validity. This

is in line with the opinion of Riduwan (2014: 15), who states that a value interval of 81-100 is a very correct category. Based on these values, the online wetland materials can be completed as a final product.

Although the online wetland materials are considered valid, there are still strengths and weaknesses from the result of the judgment from the experts. The first strength is that the online wetland materials can be used as enrichment materials to improve their knowledge about wetlands. The second strength is that the materials in the product are related to the content needed by the students. The findings of some previous studies show that the students chose the materials that were mostly related to their daily lives and studies because the materials can determine their academic achievement and successful communication in their future careers as professionals (Faraj, 2015).

The last strength is that the product is presented interestingly for the students. Since the materials are presented attractively in the website, the materials involve many attractive and interesting illustrations and figures. The teachers and the students also show a positive attitude toward using technology, especially computers in the classroom (O'Bryan & Hegelheimer, 2007; Zhao, 1997). The use of technology is seen as an important means promising to improve Indonesian ELT more efficiently (Hidayati, 2016:39).

On the other hand, some weaknesses are also stated by the experts. The first is that the writing font is too small for the audience to read. Furthermore, only very few games related to the materials are provided on the website; hence, it is suggested for the researchers to add more games to boost students' motivation to learn. The last is the illustrations about wetlands, especially in Banjarmasin and Indonesia. Consequently, more pictures of wetlands in Banjarmasin and Indonesia should be added so that the students can see a real figure of wetlands on their surroundings based on their real life.

### **Conclusion and Suggestion**

Based on the Discussion, it can be concluded that the materials for wetlands subjects are not fully provided by the university and the lecturers of FKIP ULM. The teaching materials have not supported the learning process of this brand-new subject. Therefore, it is necessary to develop models of teaching materials that can

serve as a model for teachers to develop their teaching materials and tailored to the needs of students and can be linked to real-life contexts of students as well. Through some phases of activities that have been carried out, this study produced an online wetland material for students of the non-English department of FKIP ULM. Development activity in this study starts with conducting need analysis, developing the instructional materials, designing and conducting formative evaluation, revising instructional materials, and conducting the summative evaluation. The study results show that online wetland materials are practical and effective for learning wetlands subjects.

Based on these results, it is expected that students can develop their autonomous learning related to wetlands since the online materials can be accessed at any time and place. Furthermore, it is valuable for the Wetland subject lecturers to use the online materials as additional teaching materials to suit the needs of students and can be linked to the real-life context of students, especially the knowledge about wetlands.

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