Developing communicative LMS-based English for specific purposes learning materials with CLIL approach

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ABSTRACT

Teaching English for Specific Purposes in the age of technological innovation necessitates a new strategy for communicative contexts that incorporates technology into the teaching and learning process. CLIL (Content and Language Integrated Learning) approach is considered a suitable approach in which students not only understand the content and context of situations that are practiced following the actual conditions in the industry but are also expected to be fluent in two-way communication. This study aims to develop an LMS-based communicative teaching material with the CLIL approach. Using the Research and Development method by applying the ADDIE model, 60 students were involved as the research subject, two lecturers were observed and interviewed, and three expert judges evaluated the quality of the communicative LMS-based materials developed. The results show that the developed materials were of excellent quality, with a mean score of 4.98 from the three expert judges, and the students have perfect perceptions towards both the LMS's features in English learning materials and the use of the CLIL approach in English learning materials. Pedagogically, it is advised that if internet access is unavailable, the lecturers figure out a means to get over last-minute obstacles.

INTRODUCTION

With the rise of demand from the Indonesian government through the latest curriculum called MBKM (Merdeka Belajar Kampus Merdeka) for the quality of graduates to be able to go and be involved in industry operations since early, students' English competence and proficiency has become one of the points assessed primarily in the students' interview with the foreign universities and the industry. English for Specific Purposes in Higher Education has become a crucial issue now, and students are expected to master the English subject to support their careers in the future (Goh, 2012; Pireddu, 2021). It is emphasized that by learning English for Specific Purposes, students who learn specific skills in their study will not only obtain significant contributions to their English skills but also support the operations of the specific skills being learned. According to Tomlinson (2003), a general term used to describe the teaching of English to students who are studying the language for specific work- or study-related purposes is "English for Specific Purposes" because the instruction would make reference to their particular subjects and aid the students in understanding the language that would commonly be employed.

On the other hand, fast-paced technology enhancement allows people with different occupations to do more things than ever before. It was overwhelming to cope with the development, yet a fresh air to many as technology has become advantageous, especially to teachers. These technologically enhanced teaching tools have significantly transformed how people learn and choose to study (Tabassum, 2021). Learning Management System (LMS) has emerged as one of the methods more beneficial in teaching the English language in the post-pandemic era, where physical contact is restricted, and a "greener" classroom environment is strongly encouraged. Numerous studies and research projects have used a variety of learning management systems (LMS), including Google Classroom, Moodle, and other well-known open-source LMSs, to apply LMS in the language

education (Ivanjko & Grubješić, 2019; Rudneva & Valeeva, 2017; Rymanova et al., 2015; Zainuddin et al., 2019).

LMS is defined by Dudeney & Hockly (2007) as a learning 'platform' or Virtual Learning Environment (VLE) that is a web-based platform that can be used to store course content. Students can access it via the Internet, view course materials like documents and audio and video lectures, participate in activities like tests, surveys, and quizzes, or use communication tools like discussion forums or text and audio chat. LMS, a website-based integrative learning management system Azizah (2020), was highly sought-after, particularly during the pandemic because of COVID-19.

The LMS's online learning activity generates a variety of experiences and perceptions for both teachers and students (Adedoyin et al., 2023; Baldwin & Ching, 2019; Jureynolds et al., 2023; Sari & Sari, 2022). LMS has been a helping hand to English for Foreign Language (EFL) teachers as it has been recognized that the educational paradigm is more successful in an active student-centered learning environment. Teachers may give students extensive resources and materials through LMS, which they should do for online classrooms and in-person classes. Gautreau (2011) adds that on its website, LMS provides educational tools that enable lecturers, professors, and teachers to design lessons and engage students in their studies. Dudeney & Hockly (2007) add that the benefit of using an LMS for course delivery is that everything is in one location. Most LMSs also offer tracking features, allowing teachers to know who has signed in when and what activities or documents and forums their students have visited.

Additionally, they offer advanced capabilities for evaluation and grading, keeping track of each learner. After that, teachers can assess students' forum posts, written assignments, and other work on the LMS, and these grades are immediately recorded. The results of automatically graded assignments (such as tests or quizzes) will also be added to the students' "grade book," which they can examine at any time to review their performance.

However, LMS is merely a tool to let teachers reach and interact with students quickly and flexibly. "We should always link instructional decisions about technology to the goals and objectives of the curriculum; all educational technology use needs to be evaluated for its effectiveness use" (Sokolik, 2014). Byram, as cited in Ronaldo (2016), argues that finding out what the requirements of the students are and then developing educational materials specifically designed to meet those needs. This indicates that the creation of teaching materials for English for Specific Purposes strongly emphasizes both the provision of materials and an examination of students' requirements. As a result, the provided material will help and support students in meeting their needs on the job. As ESP instruction aims to stimulate the students' communication abilities and fluency, the communicative side of the teaching and learning process should also be encouraged.

Content and Language Integrated Learning (CLIL), among other strategies, is recommended for ESP programs. Del Pozo (2017) suggests possible alignment between language and content, paying particular attention to usage. In ESP, for instance, the use of CLIL for requirements and genre analysis has succeeded. Sumartana et al. (2019) experimented with implementing CLIL in the English for Mechanical Engineering (EME) course in Politeknik Negeri Bali in 2019 with a positive result. The analysis showed that the students had improved presentation skills and had favorable attitudes towards CLIL. With an emphasis on communicative, student-centered learning through the CLIL approach, this research aims to understand further the use of LMS to manage classroom teaching and learning activities as well as the learning materials.

Students studying English for Tourism Purpose (ETP) learn topics like how to manage guest check-in and check-out and how to handle the guest's laundry in addition to the standard English taught in the tourism business. To encourage the students to acquire the English language and subject more communicatively, CLIL may be utilized in ETP in this situation. Numerous studies indicate that university students view CLIL as relevant and that as CLIL's content becomes more in-depth and complex, their interest in and confidence in their ability to learn grows (Sulindra, 2019; Vega & Moscoso, 2019). Another study showing a positive result with a different type of respondent was conducted by Wahyuningsih et al. (2016), who investigated teachers' attitudes or perceptions towards CLIL. The study demonstrated that CLIL applied to ESP instruction and that teachers had favorable attitudes towards its use in ESP classes, even if they acknowledged that CLIL required more rigorous preparation.

For teachers, especially English teachers, to use various digital platforms or learning media to obtain the best learning results, CLIL can be integrated with traditional face-to-face teaching and the online-based method. A case study conducted by Salekhova et al. (2019) integrated LMS (Moodle) into the face-to-face CLIL classroom of ESL teaching. The result showed that face-to-face and LMS-based classes developed a more profound and engaging learning strategy that improved student learning. The study also demonstrates that the online platform (LMS) served as a repository from which the students could quickly access instructional resources, data, and pertinent audio-visual sources.

CLIL has successfully been applied in ESP classrooms with the implementation of LMS; however, none of the studies investigating how LMS is incorporated in face-to-face teaching, especially to implement and encourage communicative activities of ESP teaching and learning process. With Canvas Instructure as the leading LMS being used globally for ESP classes in the vocational higher education context, Canvas Instructure Free-for-Teacher (FFT) is used in this study to aid in developing the English for Room Division communicative learning materials. Canvas Instructure FFT is chosen because it provides most of the features needed that have been mentioned by Harmer (2008) as a good VLE platform – a tool that learners on the Internet can access. They can see course content, such as documents, audio, and video lectures, and do activities such as quizzes, questionnaires, and tests, or use communication tools like discussion forums or text and audio chat.

The present study developed teaching materials as an e-module by incorporating a Learning Management System (LMS), namely Canvas Instructure Free for Teachers (FFT). Since it tracks students' progress and can be customized for each section or class studying the same subject, Canvas Instructure FFT is preferred since it offers all the features required not only by students but also by teachers (Al Khoeri et al., 2021; Fatimah & Nurfitriani, 2022; Garcia et al., 2021; Santiana et al., 2021; Sari et al., 2020; Virginiya, 2023). The instructional resources are accessible on any device through its website or mobile application and can be configured according to the demands of the teachers and pupils. Interactive e-modules can show graphics, audio, video, and animation. They also provide formative assessments and quizzes with feedback that can be used immediately to encourage two-way communication. The materials made were usable for group and pair work; they can be utilized to encourage self-directed learning and communicative instruction. The capabilities of Canvas Instructure FFT give teachers adaptable settings so they may match the classroom environment.

METHOD

This research used the Research and Development (R&D) method to apply the ADDIE model design. This model is applied because this model offers a systematic framework for product development, primarily for instructional design in the learning context (Nita et al., 2022). Five stages are applied in this model design: Analysis, Design, Development or Production, Implementation or Delivery, and Evaluation. The newest model by Branch (2009) is used in this research to develop communicative teaching materials for English for Room Division based on LMS by using the CLIL approach.

The subjects of this study were 60 students in the second semester of the Tourism Department at Politeknik Negeri Bali taking English for Room Division subjects. The study subjects were given a questionnaire to gain their perceptions towards implementing LMS, which is Canvas Instructure FFT, and how CLIL is applied in the LMS-based English for Room Division learning materials. Three expert judges also evaluated the quality of the learning materials being developed by its design and content.

The "Analyse" stage of the ADDIE model's first stage was performance gaps validation, established instructional goals, and identified the materials needed to teach English for Room Division to students in Politeknik Negeri Bali's second semester of the Tourism Business Management Study Programme by providing questionnaire to students who took English for Room Division subject, and observed and interviewed two lecturers who teach English for Room Division subject in unstructured interview by posing open-ended questions regarding the teaching and learning process has been done. The second step is "Design," a list of tasks is compiled, performance benchmarks are established, and a plan for testing is developed. To enable gamification settings for planned activities, perform this action. In the third step, "Development," content and the supporting media were created and selected following

the expert judges' advice. The learning materials were then tested in Student View - a feature the LMS offers.

The second semester's "Implement" stage was undertaken to reach 60 students who took an English class for room division. The final stage, "Evaluate," was carried out by establishing the assessment criteria, selecting the evaluation tools, and carrying out the evaluation. The generated materials were subsequently assessed using professional judgment. After implementation, the students were evaluated to ascertain their opinions regarding the use of the instructional materials. This was done utilizing a Google Form. To gather information, perceptions, and feedback regarding using English learning resources for English for Room Division based on LMS using the CLIL technique, the form was included in the Canvas Instructure FFT as an exit ticket.

Two data collection instruments used in this research are Questionnaire and Validation from the expert judgment. The questionnaire was used to measure the students' perception of English learning materials by using three indicators: perception, problem, and students' expectations. To obtain the data related to students' perceptions, there were 20 statements included in the questionnaires. There are two indicators, namely: 1) LMS's features (statements 1 to 12) and 2) CLIL approach (statement 13 to 20). Validation was done by the expert in the educational field of English teaching and the content, that is, Room Division, which includes the Front Office and Housekeeping Department.

Two types of data analysis techniques were used in this research: Quantitative Data and Qualitative Data. Quantitatively, the data was analyzed by using the ratio formula. The questionnaire results on students' perception were categorized as very good if the ratio is above 80%, good if the ratio is between 60% - 79%, and acceptable or sufficient if the ratio is between 40% - 59%. Quantitative data from the validator evaluation list is first presented in the table. Then, the following formula is used to calculate the average (Suharto, 2022):

R = average validator assessment
Vi = validator assessment score
n = number of validators

To decide on the validity of teaching materials, the following criteria are used:

a. If the mean > 3.20, then the learning design is very valid.
b. If $2.40 <$ means ≤ 3.20, then the learning design is valid.
c. If $1.60 <$means ≤ 2.40, then the learning design is quite valid.
d. If $0.80 <$ means ≤ 1.60, then the learning design is not really valid.
e. If the average ≤ 0.80, then the learning design is not valid.

RESULTS AND DISCUSSION
Results
The study was conducted in five stages following the ADDIE model, from the Analyze to Evaluation stages. The stages involved stakeholders, such as students, lecturers, and expert judges, to develop comprehensive English learning materials for Room and Division subject.

Analyze stage
A need and problem analysis was conducted to see the lecturers' and students' points of view by conducting classroom observation, interviewing with the senior lecturer, and gathering information from the students on the expected materials and the subject in order to identify the characteristics of communicative LMS-based learning materials for the English for Room Division subject. The two interviewed lecturers stated that all the necessary language skills, including speaking, reading, writing, and listening, are competence-centered on the subject. This is consistent with the questionnaire (see Figure 1 below) distributed to the students, which indicated that speaking should be prioritized over other language skills and components in the study of English for Room Division.
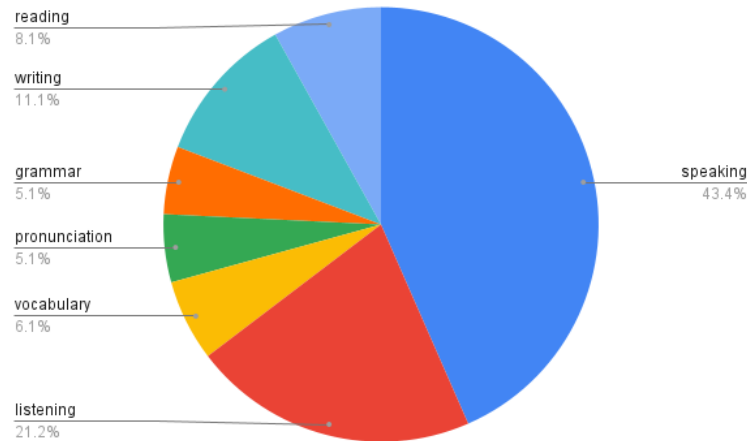
Figure 1. Questionnaire result on the most crucial component to be practiced in English for Room Division class

These other language skills and components include reading, writing, listening, grammar, pronunciation, and vocabulary. Several respondents also mentioned the need for gamification in learning as it increases their learning motivation (see Figure 2 below).
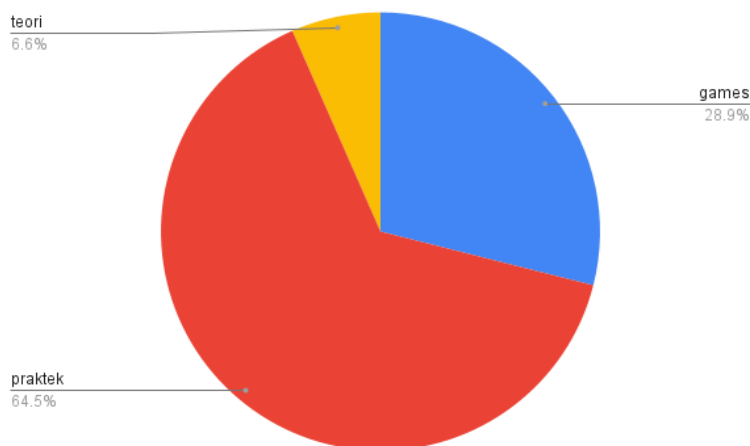

Figure 2. Questionnaire results on the recommended classroom activities

As a result, it was found that: (1) activities were mainly conducted in groups by having role play and presentation; (2) students were limitedly exposed to listening activities which would help them become accustomed to native speakers' accents and pronunciation; (3) the lecturers stated that the existing teaching materials were not attractive enough in terms of appearance, design and content; and (4) existing LMS was only used for learning materials storage online for the students download, access the handouts conveniently, and upload assignments or tasks. Based on the observation, those caused boredom, decreased motivation to study the material, and decreased exposure to using the target language in classroom practice. These state that it is essential to create communicative teaching resources that may encourage students' enthusiasm for learning. These materials should then be added to the LMS as media that the students can access both within and outside the classroom.

Design stage

Following the "analyze" phase, the task inventory and performance goals were modified following the syllabus (RPS/Rencana Pembelajaran Semester) for the English for Room Division course utilized by the Tourism Department of Politeknik Negeri Bali. Daily performance was considered while using formative and summative assessments. RPS is intended to serve as a manual for lecturers implementing created goods. Learning objectives, indicators, teaching resources, teaching strategies,

scheduling, and learning evaluation are all parts of the RPS. The exercises were created with communicative teaching and learning in mind, adhering to the ESP (English for Specific Purposes) tenet that authentic materials should connect students to the target setting.

To design communicative LMS-based learning materials, the researcher designed activities that would be conducted for group- and pair-work coded "IC," which means "In-Class Activity," and set the password so that the students cannot access the activities before the class and can only be done in the classroom. Additionally, this is meant to answer the limitation of LMS usage only for the learning materials storage and to endorse the Communication aspect in CLIL. This would improve students' readiness for technology and enhance the spirit of having a paperless classroom. Authentic materials were also included to introduce different cultures in the conversations usually done in the Room Division or the hospitality industry in which all guests would come from around the globe and their diversity. This would also support the CLIL aspects, especially the Content, Cognition, and Culture.

Development stage

Having the topics and types of materials to be carried out into the modules in the "design" stage, the teaching materials were selected, and supporting media were developed. The researchers arranged this module based on the students' needs analysis, design, and material development. Based on the RPS/syllabus provided for English for Room Division subject, the themes are divided into 12 sections. The following sections are as follows: (1) Handling Reservations, (2) Being an Airport Representative, (3) Handling Check-ins, (4) Welcoming Guests, (5) Handling Phone Calls, (6) Handling Guests' Requests, (7) Housekeeping and Turndown Services, (8) Handling Complaints, and (9) Handling Check-outs. Guidance was also developed for the student, and a pilot test using the Student View provided in the application was also conducted to shed light on the effectiveness of the LMS for delivering and accessing the learning materials.

Implementation stage

The implementation stage was carried out in the first four meetings of the semester. The topics discussed were (1) Handling Reservations, (2) Being an Airport Representative, (3) Handling Check-ins, and (4) Welcoming Guests. Below are several figures showing the onsite teaching and learning process implementation using LMS-based English for Room Division materials with the CLIL approach. In order to find out the effectiveness of the teaching materials, students were asked to fill out a questionnaire to gather the students' responses on the teaching materials delivered in LMS.

The result of data analysis about the students' perception of English learning materials of 60 students was obtained. Data in this research were obtained through questionnaires from second-semester students of the Tourism Business Management Study Program who used the learning materials in English for Room Division class. Students' perception of the use of LMS-based learning materials for English for Room Division was also collected through a questionnaire that focused on LMS features and implementation of the CLIL approach.

The LMS's features are the first indicator of students' perception of English learning materials. The statements are given to know how the students perceived the implementation of learning materials using the Canvas Instructure Learning Management System, especially its features. The data is shown in the table below:

Table 1. The Number of Responses for Each Statement

QUESTION RESPONSE	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1	1	1	1	1	1	0	0	0	0	0	0	1
2	0	1	1	1	0	2	1	2	2	2	1	0
3	2	6	4	4	4	9	3	13	4	3	6	5
4	30	25	26	21	38	36	22	29	23	23	35	20
5	27	27	28	33	17	13	34	16	31	32	18	34
TOTAL	60	60	60	60	60	60	60	60	60	60	60	60

Based on the table above, the students mostly responded on a scale of 4 or 5 where they agree or strongly agree with the statements. The index level of students' perception is shown in the table below:

Table 2. The Index Level of Each Statement

QUESTIONS	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	AVERAGE
INDEX	87,3	85,3	86,3	88	83,3	80	89,7	79,7	87,7	88,3	83,3	88,7	85,6
CATEGORY	VG	VG	VG	VG	VG	VG	VG	G	VG	VG	VG	VG	VG

Based on the table above, the LMS features level obtained an average index of 85.6% in the outstanding category. As seen in the table, almost all statements got an index above 80% in the excellent category, whereas only one statement got a 79.7% index in the good category. It means that students have an excellent perception of the LMS's features in English learning materials.

The second indicator of students' perception of using English learning materials is using the CLIL approach. The students should answer statements 13 to 20. The statements are given to know how the students perceived using the CLIL approach in the learning materials. The data is shown in the table below.

Table 3. The Number of Responses for Each Statement

QUESTION / RESPONSE	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	1	1	1	1	1	1	0	1
2	0	0	0	0	0	0	1	0
3	3	3	3	1	5	3	2	4
4	27	24	28	25	22	36	26	25
5	29	32	28	33	32	20	31	30
TOTAL	60	60	60	60	60	60	60	60

Based on the above table, most responses are on a scale of 4 or 5, where the students agree or strongly agree with the statements. Meanwhile, the index level of students' perception is shown in the table below.

Table 4. The Index Level of Each Statement

QUESTIONS	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	AVERAGE
INDEX	87,7	88,7	87,3	89,7	88	84,7	89	87,7	87,8
CRITERIA	VG	VG	VG	VG	VG	VG	VG	VG	VG

Based on the table above, the level for the CLIL approach used in learning materials obtained an average index of 87.8% in the excellent category. As the table shows, almost all statements got an index above 80% in the outstanding category. It means that students have an excellent perception of using the CLIL approach in English learning materials.

The average score for the two aspects was then calculated for the mean score. After the data analysis, it was found that students had an excellent perception of English learning materials based on the Learning Management System using the CLIL approach, with respondents' level average of about 86.52%. This number showed that the level of students' response is in the outstanding category. It means that implementing learning materials using the Canvas Instructure Learning Management System and the CLIL approach in English learning materials has an excellent response or perception from the students.

Evaluation stage

This section involved expert subjects to determine the learning devices' validity. To get quality communicative learning materials, the researcher used expert appraisal. Expert appraisal was a technique for obtaining feedback to improve the communication LMS-based module for English for Room Division subject. Feedback was received through formative evaluation, and the materials were revised. Two kinds of feedback were gained they were 1) the quality of the communicative learning materials and 2) comments, suggestions, and recommendations toward developing communicative learning materials. In order to gain feedback from expert judges, an expert judgment rubric was created.

The expert judgment rubric was compressed into a set of assessment rubrics consisting of 5 aspects. The aspects included in the expert judgment rubric were (1) content, (2) presentation, (3) language, (4) module design, and (5) CLIL-components application. The expert judgment rubric was in

the form of a scoring rubric with a total 26 statements using five range scales where "1" indicates Strongly Disagree, "2" Disagree, "3" Neither Agree nor Disagree, "4" Agree, and "5" Strongly Agree. The 26 items include: 4 items were on the content aspect, which focused on the appropriacy of the content syllabus; 4 items were on the presentation aspect, enclosing technique, complements, task, and module presentation; 3 items were about language use; 3 items were on module design, especially the feature and display layout; 12 items were assessing the CLIL components including the 4Cs framework of CLIL approach, namely content, communication, cognition, and culture.

The expert judges were three people who judged the quality of the developed communicative LMS-based learning materials. One is an expert in English teaching in a vocational context, one is a content expert with a Front Office department background, and one is a content expert with a Housekeeping Department background. The experts evaluated the developed communicative teaching materials and gave feedback to make them more appropriate, effective, and efficient. The result expert judgment rubrics identified the quality of the LMS-based materials for English for Room Division subject. The result of the expert judgment rubrics can be shown as follows:

Table 5. Results of Expert Judgment

Aspect	Score		
	Expert 1	Expert 2	Expert 3
1	17/20	20/20	20/20
2	17/20	20/20	20/20
3	15/15	15/15	15/15
4	15/15	15/15	15/15
5	59/60	59/60	60/60
Total	123/130	129/130	130/130
Mean	4.73	4.96	5.00

Scores from the expert judgments were analyzed by calculating the mean score from each expert. A final score for the overall quality of the communicative LMS-based learning materials for English for Room Division subject was gained from the mean score from each expert. Based on the analysis, the final score was 4.89. The learning design was considered very valid as it was above 3.20 and had a high quality for teaching English for Specific Purposes, especially in Room Division.

In addition, comments, advice, and recommendations were gained from the three experts. All experts mentioned that the content was up-to-date, and the materials were accessible and comprehensible. The content will help the teaching and learning process, especially in English for Room Division as one of the English for Specific Purposes subjects in the Tourism Department. Nonetheless, as the learning materials are LMS-based, it might hinder students with limited internet access. Conversely, these LMS-based learning materials were accessible on any device. They could promote self-directed learning as it can be opened on the website and downloaded as a user-friendly application. The LMS used, Canvas Instructure, was also provided for students and teachers. The experts strongly agreed that this could help not only the learning but also the teaching process. The materials designed were also said to be communicative as the activities were focused on internet-based activities and the activities that can be done in class. The communicative LMS-based learning materials for English for Room Division were revised in response to comments, suggestions, and recommendations based on the experts' evaluation.

Discussion

The communicative LMS-based English for Room Division learning materials created a meaningful atmosphere while incorporating technologies. Some recommendations on teaching using technology have been applied in the communicative LMS-based English for Room Division learning materials, such as "language teachers should urge their learners to use technology in developing their language skills." This finding supports Ahmadi (2018), who mentioned that technology is significant as a tool to assist teachers in facilitating language learning for their students. Therefore, the design of the learning materials comprises not only activities that promote self-directed learning as it is usually delved into the use of Canvas Instructure FFT (Bowen & Thomas, 2022; Rabiman et al., 2020; Sudianto et al., 2019) but also communicative in-class activities to encourage two-way communication. Therefore, the LMS can function to its maximum and not as mere learning materials storage and assignment

collections. How LMS is underused in face-to-face teaching and learning processes in higher education, as mentioned by Washington (2019), can be tackled.

However, the results of students' perceptions towards using LMS, Canvas Instructure FFT in this study, showed the lowest percentage on statement #8: "Learning Management System (LMS) used is accommodating learning sources well and can be accessible easily without any problems." It is because some troubles were found during the implementations, such as internet connection problems, older versions of the website or operating systems, and low-storage phones, which made the students unable to access or download the latest version of the application, slow content load, and application bugs. Nevertheless, most of the students provided positive results and comments on how the LMS helped them understand the subjects better since it provided live results on the exercises done in the system to encourage students' independent learning (Sari et al., 2020).

This developed communicative LMS-based learning materials for English for Room Division had also implicitly inserted the 4Cs framework of the CLIL approach in the topics provided. They are Content, Communication, Cognition, and Culture, following Danilov et al. (2018). The topics or disciplines covered in the English for Room Division learning materials are called content, which also focuses on English use, especially in the hotel Room Division, including Front Office and Housekeeping. Students use communication as their primary language throughout the course. Also, learning to think implies the development of cognitive abilities in using English for Room Division, including contextual vocabulary, grammatical structure, and correct pronunciation. The culture was introduced as tolerance for various civilizations and worldwide understanding, including how students are expected to respond to certain utterances in the hotel's Front Office and Housekeeping departments.

The communicative LMS-Based English for Room Division learning materials were believed to have implemented those four frameworks of the CLIL approach. The use of updated authentic materials on the topics based on the syllabus that is being incorporated to feed the content framework and students' cognition, and alleged to convey the cultural sensitivity should be possessed by the students before they are in the real industrial world of work and meet guests from around the world and handle them in the Room Division department. With the aid of the LMS being incorporated, the storage of communicative activities is enhanced and easily accessed through any devices owned by the students. It drives the interactive classroom atmosphere to be limitless. This supports Coyle (2007), who mentioned that designing instructional materials with the development of students' linguistic abilities, subject-matter knowledge, cognitive capacity, and cultural awareness in mind is ideal.

To put it another way, resources for CLIL should be created considering the unique setting, local school cultures, and curricula, as well as the efforts of CLIL practitioners. In Coyle's (2007) 4Cs paradigm, contextualization is a crucial idea for assuring the effectiveness of CLIL-based learning in various circumstances. Also, students can critically participate in today's cultural and contextual concerns in a setting provided by CLIL. This added value allows for student decision-making, individual involvement, and authenticity in the content learning process through a foreign language.

Students' perceptions of the learning materials towards implementing the CLIL approach showed positive results. Nevertheless, statement #18, "Learning materials of English for Room Division subject provides sufficient information on the English language components related to the topic." showed the lowest number. In the implementation stage, some students mentioned that supporting authentic materials should be added instead of adopting materials provided in search engines or other textbooks published outside Indonesia (students' home country). They believed that having actual content from their home country as an example could engage them better and more before working in the actual industry. Therefore, improvement for the developed English for Room Division learning materials is highly encouraged for a better experience and more resourceful content.

CONCLUSION

Through developing comprehensive learning materials, starting from the Analysis, Design, Development, Implementation, and Evaluation, the communicative LMS-based English for Room Division learning materials were indicated as a high-quality resource by the three expert judges. Likewise, these learning materials also obtained very positive results on the students' perception after implementing the resources, both towards the implementation of CLIL and the LMS on the English for Room Division learning materials. The analysis, done through a questionnaire with close- and open-

ended questions, also showed that interactive classroom activities are needed and not only fun activities, such as gamification, but also combining all language skills with an emphasis on speaking and practice.

Some suggestions can be derived from the analysis of observation, questionnaires, and interviews. It is suggested that the educator discover a way to overcome impromptu difficulties if internet access is inaccessible, as the materials depend on internet access. Canvas Instructure FFT is highly recommended to be the Learning Management System (LMS) used to store the learning materials, which can be used not only for online learning (Fatimah & Nurfitriani, 2022, 2022; Santiana et al., 2021; Susanti et al., 2022), but also meaningful communicative face-to-face teaching and learning process as implemented in the present study. Vega and Moscoso (2019), on the other hand, mentioned that there is no significant effect of increasing language proficiency by applying the CLIL approach. Therefore, other researchers are encouraged to continue this study to test this product to discover its quality, the effect of using the product on students' English skills, and the effectiveness of the CLIL approach applied to this learning material. It is also suggested that other researchers could develop another communicative LMS-based material on other subjects, especially English for Specific Purposes, and teaching media to enrich this learning material.

ACKNOWLEDGEMENT

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