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ENGLISH MATERIALS DEVELOPMENT FOR AN UNDERGRADUATE COMMUNICATION STUDY PROGRAM: A NEED ANALYSIS IN INDONESIAN CONTEXT

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Abstract

Need analysis (NA) is one of the initial steps in developing learning materials. In the English for Specific Purposes (ESP) context, it is an essential asset to identify learners' needs and determine the areas they are lacking. Thus far, NA particularly in Communication Science Program (CSP) in Indonesia has not been widely explored. In University Y, the CSP students are lacking English language learning materials. Therefore, this mixed-method study aims to explore the results of NA for developing such materials. The data were gathered through document analysis, lecturer and alumna interviews, along with student surveys. The results revealed that students' learning needs focus on the desire to improve their English proficiency, particularly in speaking and grammar, for career orientation. Moreover, the materials should be compiled with text types that support the achievement of the goals e.g., advertisements, reports, narrative and argumentative texts that are preferable to be taught through a BL delivery method. These materials should also be actualized in activities that can accommodate three learning styles, namely visual, audio, and kinesthetic, with more emphasis on the first. The implication of these findings will be helpful to create a more effective English class based on the current demands.

Keywords: communication study program, English for specific purposes, need analysis

Introduction

The urgency to master English has been increasingly heightened due to the rapid development in science, information, and communication technology. English, as a lingua franca, has become a minimum employment requirement in the 21st-century era (Poedjiastutie et al., 2018) and skills to survive in global

development (Hariyanto et al., 2022). The growth of communication and media has also resulted in the necessity of having good communication skills as ways of fulfilling the needs of political, educational, social, and business purposes both locally and globally (Bajari, 2017). These situations are evident that English communication skills are highly needed by students in tertiary education, especially by those majoring in Communication Study Program (CSP). They are expected to be professional communicators. All things considered, English has become must-have skills that needs to be taught because it is intertwined with the qualifications of students' future careers.

The Indonesian government has issued a policy stating that English must be taught in higher education (HE) to prepare future generations for the globalization era (Kemdikbud, 2020). English, therefore, must be accommodated appropriately by specifying the materials in English for Specific Purposes (ESP) to deal with global demands. Not only does ESP integrate the acquisitions of disciplinary knowledge and professional expertise, but also takes professional practice into account (Musikhin, 2016). ESP materials, such as textbooks, have roles as comprehensible input for students and as tools to maintain their ongoing knowledge (Crawford, 2002). Hence, authentic and meaningful learning materials are needed to support students with the necessary skills to prepare them at academic and professional levels.

Unfortunately, creating effective materials is a complex process as it requires to need analysis (NA) to specifically fulfil students' needs in one context (Graves, 2000). On the ground of the importance of NA in ESP settings, several attempts have been made to investigate the issue, especially in HE. In Asian countries, several studies that concentrated on English for industrial design (Adzmi et al., 2009), healthcare professionals (Mustafa et al., 2017), and the tourism industry (Kholidi et al., 2022) were conducted in the Malaysian context. Moreover, the ones for engineering students (Kim, 2013) and flight attendants in South Korea (Kim & Jin, 2017), tourism courses in Japan (Wagner, 2021), business administration in Thailand (Jitpanich et al., 2022), and manufacturing students in China (Luo et al., 2022) have also been investigated. In Indonesia, similar studies have been reported in the contexts of midwifery (Hariyanto et al., 2022), pharmacy (Syakur, Zainuddin, et al., 2020), medical students (Rinawati et al., 2022), agricultural students (Hajar & Triastuti, 2021), and non-English study program (Ekayati et al., 2020). These studies have provided important information on the requirement of conducting a NA for the success of teaching English in various programs.

Although the issues have been extensively studied in the last decade, the existing literature indicates that research focusing on NA, especially in the CSP has not been widely explored, particularly in the Indonesian context. Meanwhile, based on the data presented by the HE Database (PD-Dikti), Social Sciences is one of the top three whose student distribution is higher than other programs (PD-Dikti, 2020). The CSP, categorized under the social sciences, has also been getting more attention due to the increasing trend of social media and mass media (Bajari, 2017). To respond to these phenomena, the English educational practices in University Y's CSP need to be revisited. Based on the preliminary observation, it was found that the study program did not have any compiled and organized ESP learning materials

that were based on students' needs. There was only a separate compilation of files, including materials, tasks, and worksheets. It then likely led to the difficulty of fulfilling students' future needs, not to mention the possibility of missing important parts as they hardly got access to the whole materials. Thus, this study aims to explore the results of the NA for developing English material in the CSP. This work will generate fresh insight into facilitating ESP teachers of CSP with the results of needs analysis based on students' needs, necessities, lacks, wants, and learning needs.

Literature Review

The national policy of English in higher education

The HE curriculum in Indonesia has undergone several changes from 1994 to 2022. Primarily, students' learning outcomes prioritized the achievement of science and technology mastery known as a Content-Based Curriculum (KBI). Thenceforth in 2000, Indonesia reconstructed its curriculum concept to a Competency-Based Curriculum (KBK). Moreover, in the 2002 era, curricula prioritized competency achievement as a form of effort to bring education closer to the labour market and industry (Kaimuddin, 2015). After that, the 2012 curriculum underwent a slight shift by providing a measure of equality with learning outcomes to maintain the quality of graduates known as the HE Curriculum (KPT). The changes are in line with what was stated by Richards (2017) that factors shaping the curriculum's nature include the focus on learners, social reconstruction, academic rationalism, efficiency, and cultural pluralism. Finally, the recently implemented curriculum named emancipated learning *(Merdeka Belajar - Kampus Merdeka*) provides wider opportunities for students to be able to explore and develop their talent interests outside of their major field.

Above all, the changes are also supported by the rapid development of students and company needs. They should acquire both receptive and productive English skills to fulfil the designed tasks in their current study and future career (Alibakhshi et al., 2022). In addition, over the past decade, an abundance of reports has been announced in the U.S., Japan, Australia, England, Scotland (Caena & Redecker, 2019), and other countries about the demand for stronger learning to meet the obligations of life, occupation, and citizenship in the 21st century (Darling-Hammond et al., 2019). Those requirements need to be fulfilled through NA in designing the ESP curriculum and materials to support the goal stated in the national policy. Therefore, the developments of the curriculum aim to create HE graduates who are not only competitive at the international level but also have qualified capabilities.

English for Communication Science Program

English in CSP is designed not only for academic objectives but also for students' future careers. Its starting point is the concept that language is an essential component of how students live and what they do in society. Language is more than just a medium for social engagement, but also plays a part in students' social construction (McCourt, 2003). This is the critical explanation of the sociolinguistic

context. It serves as the foundation for many language-learning systems, including English Language Teaching (ELT) in the CSP.

Furthermore, in most universities in Indonesia, English is offered only two credits or more for non-English majors (Rokhyati, 2013). It is commonly found that English lessons are presented as a mandatory course for all programs/*Mata Kuliah Umum* (MKU) in various amounts of credits. For instance, Rokhyati (2013) studied numerous curricula at ten HE institutions and discovered that some universities provided two credits for English while others allocated three to five credits, depending on the university's internal policy. Even though there is no restriction on deciding the objectives of ELT, it has been found that ELT functions as a means of preparing students to boost their English proficiency.

Need analysis for ESP

To date, there is no strict regulation on whether and how English teaching should be carried out in Indonesian HE. Commonly, English is either taught in general as English for Academic Purposes or based on the major as ESP. Richards and Schmidt (2010) define ESP as an English course or program comprising content areas and objectives that regard the specific needs of a certain group of students. This is based on the idea that different groups of students should have distinct needs depending on their backgrounds (Margana & Widyantoro, 2017). That is, learning materials, including textbooks, used to teach ESP should be made different from those used for general English. Unfortunately, previous studies (Margana & Widyantoro, 2017; Rahayu et al., 2020; Syakur et al., 2020) have shown that ESP has not gained wide recognition in Indonesia. One of the indicators is the limited credit assigned to the course. Moreover, existing textbooks used in either vocational high schools or non-English departments are yet to be based on proper NA.

NA is one of the initial steps of developing learning materials in general. In ESP, doing NA is crucial that Hutchinson and Waters (1987) consider the step a "minimum of an ESP approach to course design" (p.54). NA results are an essential asset for ESP teachers to identify learners' needs and determine the areas they are lacking (Alsamadani, 2017). The absence of NA and the failure to address its results in developing a syllabus and learning materials will likely lead to the production of inappropriate materials and the failure to achieve desired impacts on learners (Darici, 2016). Therefore, materials designers should conduct NA accordingly.

Conducting NA requires a thorough consideration of many aspects. Hutchinson and Waters (1987) suggest conducting NA by considering learning needs and target needs. Learning needs are related to why learners take the course, how they learn, available resources, and course settings. Meanwhile, target needs consist of necessities, lacks, and wants. Necessities are what learners must know to function effectively in the target situation. Simply put, necessities concern what graduates need in the future. Thus, to gain an understanding of the necessities, graduates and experts in the fields can be involved in the NA to complement students' thoughts on what should be considered in the course (Moattarian & Tahririan, 2014). Meanwhile, lacks are what learners already know in the target situation. It would be useful to decide which of the necessities the learners lack. Lastly, wants are what the learner wants to learn. However, Rahman (2015) points

out that wants may not necessarily be the learners' actual need to succeed in the target situation. Students' views about necessities, lack, and wants might also be subjective. Hence, a comprehensive understanding of the three aspects as a whole and from different perspectives is necessary.

Method

Research design

This study belongs to mixed method research as both quantitative and qualitative data were collected and analyzed. Specifically, the researchers employed a convergent mixed methods design by Creswell (2015). Its primary basis is that one data type provides additional values to compensate for the limitations of the other form, and that gathering both results in a more complete understanding of the research subjects.

Setting and participants

The research was conducted in March 2022 at the CSP of University Y in Yogyakarta. The participants were the class of 2020 and 2021. They were selected because they had completed and/or were currently taking the course in the fourth semester when the course was mandatory to be fulfilled. The convenience sampling technique was used in the study to select participants who were ready and available (Creswell, 2015) as well as competent and reliable. The population was around 240. Furthermore, the researchers opened the survey for two weeks, obtained the data from this period, and collected 41 answers. Additionally, to acquire more comprehensive target needs data, the course lecturer was involved along with the alumna to enrich information related to students' needs from the employee's perspective.

Data collection technique

The data were collected from four different sources. They documented two semi-structured interviews, and surveys. Firstly, the only document in the form of the English module handbook (RPS) was obtained from the course lecturer. It included a course description, course objectives, course progression, and references. No specific modules were available to support the RPS.

Secondly, a semi-structured interview was conducted with the course lecturer and an alumna. The interview questions with the lecturer were following the domains of curriculum development principles by Macalister and Nation (2019). They are linked to (a) environment analysis, (b) needs assessment, (c) principles of language teaching and learning, (d) goals of the course, (d) materials content, format, and sequencing, (e) assessment, and (f) evaluation. Meanwhile, the interview questions with the alumna were following a framework adapted from Li (2014). The domains in the framework are related to (a) the reason why the language is used, (b) the way it is used, (c) the content areas of the courses, (d) the time when the language will be used, and (e) the place where language will be used.

Third, the survey questions were adapted from Hutchinson and Waters (1987) framework of NA. The domains of question are related to (a) learners' demographic information, (b) English proficiency, (c) target needs (the learners' necessities,

lacks, and wants), and (d) learning needs. A total of 16 questions were in the form of short answers, Likert-scale, and checkboxes.

Previously, those instruments were reviewed by peers and two lectures thrice. The peer review was conducted during classroom discussions. At the end of the discussion, expert validation, through feedback, was conducted by the lecturers. They, who are also the experts, are experienced in teaching syllabus and materials development for years. Finally, the instruments were then revised based on the discussion results. This step was considered legal in the validation process (Kratz & Strasser, 2015). Peer review constructs the reliability of the dataset and promotes its perceived value more than any other factor. Therefore, the instruments being used in this paper are accepted based on the validation process.

Data analysis method

Once the data were obtained, they were analyzed to discover the students' needs. Firstly, the RPS was analyzed using content analysis. The analytical procedure includes finding, selecting, appraising, and synthesizing data (Bowen, 2009). They entail the process of skimming, reading, and interpreting. The framework to analyze the RPS is following the adaptation of Brown and Lee's (2015) format of a lesson plan, the partnership for 21st-century learning (Stehle & Peters-Burton, 2019), and Bloom's Taxonomy. The incorporation of the 21st-century learning models frameworks are consisting of goals, objectives, materials, equipment, procedures, 21st-century learning models (knowledge construction and self-regulation, collaboration, real-world problem solving, skilled communication, use of information and communication technology [ICT] for learning), and assessment. The analysis was conducted in the initial stage to help the researchers with the interview and survey questions. As Bowen (2009) suggests, the information contained in documents can indicate some questions to ask and situations to observe.

Afterwards, the results of the interview with the lecturer and alumna were analyzed thematically following Braun and Clarke (2006). It comprises six steps (1) familiarizing with the data, (2) generating initial codes, following the domains of Macalister and Nation (2019); (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report. Furthermore, the alumna gave some additional information through clarification after the interview with the lecture had been conducted.

Next, the results from the survey were analyzed both quantitatively and qualitatively. As the questions comprised many types of questions, they were analyzed using SPSS to see the percentage of the most frequent answers. Frequency distributions were used to assess properties of the distribution of scores (Field, 2009) such as mean, median, and mode and to find information about students' demographic data. Furthermore, their written responses were used to support the quantitative ones.

Findings and Discussion

The findings from document analysis, questionnaires, and interviews will be combined and presented in this section as they complement each other. Presenting

them separately might result in missing important information. To get a comprehensive understanding of the setting, the current situation of English in the CSP will be elaborated on first. Then, students' learning needs which deal with their underlying reasons for taking the course will be examined. Following are the results of NA categorized into necessities, lacks, and wants.

Current situation of English in CSP

The CSP of University Y offers English courses for two terms. The first is called *Bahasa Inggris* and is given during the first term. It is considered *MKU* and worth 2 credits. The course is expected to equip students with general English knowledge and skills. Whereas the second is called English for Academic Communication (EAC) and is given during the second term. It is considered as *Mata Kuliah Program Studi* (a mandatory course for a specific program) and worth 2 credits. It is expected to facilitate the development of student's skills in their fields. This research focuses on the latter as the course is supposed to concentrate on ESP which still needs to be improved.

To provide context, the contents of the syllabus for EAC are more specific and related to communication studies. As stated in the course description section of the syllabus, the course highlights three skills: vocabulary, reading, and writing. Furthermore, there are four learning outcomes to be covered in sixteen meetings. They are: students can (1) explain and apply terms and vocabulary related to communication studies; (2) understand and analyze English texts published in mass media; (3) construct sentences/texts for news, press conferences, and production scripts for media; and (4) show curiosity, discipline, critical thinking, and active participation in lectures. Those outcomes are further divided into nine sub-outcomes.

To gain a further understanding of the current situation of English teaching and learning in the CSP, the syllabus and learning materials were analyzed using a framework of document analysis. The summary of the document analysis results can be seen in Table 1.

Table 1. Syllabus and learning materials analysis results

Indicators	Analysis
Goals and Objectives	• Proper alignment of goals and objectives • Less facilitation of higher order thinking and other 21st century skills
Materials	• No listening materials/tasks • Limited speaking materials/tasks • Limited to no information about target vocabulary and language features • No specific module • Separate compilation of learning materials • Unknown order of materials
Equipment	No mention of equipment and ICT tools needed
Procedures	• Provision of opportunities to develop communication skills • Uncertain facilitation of collaboration skills
21st Century Learning Approach	Rather vague
Assessments	• Rather vague • No rubrics available

Some crucial aspects of the document analysis results are summarized in Table 1. First, listening and speaking seemed to be disregarded. Some activities required students to make use of their speaking skills (e.g., question and answer sessions, discussions), but there were no speaking materials identified from the syllabus. Whereas, listening was not addressed either as tasks or materials. Secondly, detailed information such as target vocabulary and language features were barely found. Such information is needed so that students are aware of what is expected from them in the learning. Additionally, information about equipment and ICT tools needed also could not be identified. After all, there are some missing parts from the syllabus.

In terms of learning materials, a separate compilation of files was used. They were not bent into a complete file which requires the students to gather and order the mashed-up files themselves. This problem led to a risk that the students would miss some parts as they hardly get access to the whole materials. Moreover, the materials were unstructured and not systemic. They were not written in a scaffolding cycle or with other approaches. They were not arranged based on cognitive levels of Bloom's taxonomy, which has to begin with lower-order thinking skills, i.e., remembering, understanding, and applying, to higher-order thinking skills, i.e., analyzing, evaluating, and creating. Generally, the tasks required students to jump into creating steps without trying to begin with the more manageable tasks as a preparation. Besides, the tasks were mostly done individually. Apart from being monotonous, such activities did not support collaboration as one of the 21st-century skills.

Last, the assessments for the course were not clearly defined. It was mentioned that there would be some oral quizzes and written tests. Students were also supposed to have a midterm and a final test. However, there was no elaboration on how the tests would be administered, especially for the midterm. Although it was later clarified in the interview with the teacher that the students were required to write an opinion essay for the final, it is still necessary to put such information in the syllabus as guidance for students. Additionally, complementary documents such as assessment rubrics were also not available. Hence, the syllabus needs to be complemented with more detailed information and necessary attachments.

Students learning needs

Students' learning needs deal with the reason why they take the course, how they learn, what resources need to be available, and when as well as where the course takes place (Hutchinson & Waters, 1987). Thus, students' learning needs are closely related to the target need and are often mixed. For this reason, this section points out their rationale for enrolling in the course and their resource need, whereas the concerns that are not mentioned here will be elaborated on in the other subsections in detail. Following are the summarized reasons collected from the students' surveys.

Table 2. Reasons for taking the course

Reasons	Percentage
Improving English skill	97.6 %
Supporting future career	68.3 %
Completing graduation requirement	61 %
Continuing study	39 %

Since this subject is worth 2 credits, the results are expected to show that students tend to improve their English skills only after completing one of the graduation requirements. However, from the survey, most of the students (97.6%) revealed that they took English courses to improve their English skills. The second most selected reasons include the need to support their future careers (68.3%) and to complete graduation requirements (61%). Meanwhile, few of them reasoned that they were learning English to equip them with the necessary skills to continue their studies in the graduate program. Interestingly, it can be seen that they are already aware that improving their English skills has become a necessity.

In addition to these reasons, the resources for learning are included in the learning needs. This covers the lectures' competence and attitude toward ESP, materials, and aids. According to the interview result, the lecturer has been teaching English in CSP for three years. He was involved in a team to develop the syllabus and curriculum that can meet the criteria of international standards. What has been developed is then applied in this course. Therefore, it seems that the lecturer has a background and competence in teaching ESP.

From this finding, it can be indicated that the majority of students took the course based on their will without any force. This also means that they have already had the awareness that improving their English skills is essential for particular reasons, especially for pursuing a career. Furthermore, the lecturer as one of the available student resources is assumed to be capable of providing facilities for students to improve their English skills. Thus, this finding can be used as a benchmark in setting the objectives of the course.

Students' lacks

The researchers utilized the survey to identify students' lack of basic English skills such as listening, reading, speaking, writing, grammar, and vocabulary. When reviewing and analyzing the results, the SPSS program was utilized to depict the results of students' lack. The researchers employed four distinct levels of reference to display students' skills: unsatisfactory (1), satisfactory (2), good (3), and very good (4). The categorization is determined using the Common European Framework of Reference for Languages (CEFR), with unsatisfactory for language competency level A2, satisfactory as level B1, good for level B2, and excellent for level C1. Previously, their level of English proficiency was also assessed. Based on their TOEFL score, they were in the low intermediate level, with the score ranging from 420 to 480. Their level is referred to in the CEFR Mapping Study and Interpretation, in which the range of 460-543 is lower intermediate (ETS, 2022).
Table 3 summarizes the result of students' language skills, organized from receptive to productive skills.

Table 3. Students' language skills

No.	Skills	Mean Score (*M*)	Interpretation
1	Listening	2.39	Satisfactory
2	Reading	2.59	Satisfactory
3	Speaking	1.98	Unsatisfactory
4	Writing	2.00	Satisfactory
5	Grammar	1.83	Unsatisfactory
6	Vocabulary	2.49	Satisfactory

From Table 3, it can be concluded that the students have a satisfactory level of receptive skills as proven by their scores in Listening and Reading sequentially on their mean (M= 2.59) and (M=2.39). On the other hand, their productive skills are divided into two levels: satisfactory and unsatisfactory, in which the writing skills are on M=2.00 while speaking skills are on M=198. For other skills, their vocabulary is at the satisfactory level (M= 2.49), and their grammar is at the unsatisfactory level (M=1.83). Furthermore, these findings corroborate the result of the alumna interview. Even though making grammatical errors is expected when using English, the alumna stated that correct structure utilization is critical. All in all, the students' speaking skills need to be improved as well as their grammar skills. Additionally, the learners should be assisted with exercises to improve their speaking abilities. As a result, the presence of the materials can compensate for those two shortcomings.

Students' necessities

Students' necessities have been decided by the urgent needs of planned circumstances which impair students' mastery of skills in those situations. They are not only considered for the need to master English language proficiency but also as a provision for them after graduating from the university. This part has been divided into two necessities: a) learning materials and b) 21st-century skills.

Learning materials

The questionnaire required the respondents to give information on learning materials they would like to learn. The results of the questionnaire are supported by the result of the alumna interview to see the materials' relevancy in the workplace. Both results revealed that the materials provided in the RPS were quite in line with students' wants. However, the text type and focus desired by students were not mentioned in it. Thus, to decide on the learning materials, students were asked to choose more than one among fourteen options, depending on their preferences.

Table 4. Learning materials: Text types

Learning Materials	Percentage	Learning Materials	Percentage
Advertisement	75.6%	Research	46.3%
Report	73.2%	Explanation	43.9%
Argumentative	63.4%	Poster	43.9%
Narrative	63.4%	Forms/Application	36.6%
Letters	56.1%	Exposition	34.1%
Descriptive	51.2%	Procedure	26.8%
Email	48.8%	Memos	7.3%

Detailed information about the text type chosen by students is provided in Table 4. It can be inferred that the greatest demand, by far, is for advertisement text (75.6%). Then, the majority are also interested in learning reports (73.2%), and narrative and argumentative texts (63.4%). The text types mentioned are in line with the experience of the alumna. In the workplace, advertisement text is needed to make a company and products branding, report texts are useful to make a business report and press release, and narrative as well as argumentative can support the skills of writing journalistic works. Thus, these results suggest that the materials development needs to provide topics about an advertisement, report, narrative, argumentative, and other types of texts supporting the content of materials.

In addition to deciding the text types used in the course, the focuses discussed during the lesson are also crucial to be selected. It provides engaging and interesting learning activities as well as authentic and meaningful for students. The more related the focus to the workplace, the greater students applied their abilities acquired from the lesson. The focuses that need to be learned by students are presented in Table 5.

Table 5. Learning materials: Focus

Focus	Percentage	Focus	Percentage
Mass media	95.1%	Newspaper	14.6%
Journalism	87.8%	Headlines	7.3%
Mass communication	82.9%	Broadcasting/Streaming	2.4%
Opinion Essay	56.1%	Creative writing	2.4%

Table 5 presents the evidence of the focuses desired to be studied during the lesson. What is interesting about the data is that almost all students thought that mass media (95.1%) needs to be learned. This result is followed by journalism (87.8%) and mass communication (82.9%). Interestingly, the opinion essay (56.1%) as the main project mentioned on the RPS is not the most desired focus. Nevertheless, it must be comprised in the learning media on the consideration of the lecturer and alumna.

Overall, the results indicate that the focuses required by students are in line with the alumna's experience in the workplace. The most related focuses to the company's job are journalism and mass media. In addition, the alumna also mentioned that headline is crucial to support skills needed for work in the communication field. However, even though the most voted focuses are mass media, journalism, and communication, other focuses e.g. headlines and opinion essays are important to be taught. Furthermore, English skills are also needed to make a formal speech at ceremonial events. Formal English for business and corporate including vocabulary, expression, and grammar will be very helpful for them to deal with the CV. The lesson on making a CV for seeking a job is also suggested to be attached to the course. Thus, it is important to provide basic skills in journalism, business English, and CV in the RPS for equipping students with the skills needed in the workplace.

21st-century skills

The current learning needs of students are not only mastering knowledge and skills of learning materials but also other skills supporting their future careers such as 21st-century skills. It braces their English proficiency to be applied alongside other skills required in their future workplace. The needs for 21st-century skills for students in learning English are depicted below.

Table 6. 21st-century skills

21st-Century Skills	Percentage	21st-Century Skills	Percentage
Communication	39%	Creativity	22%
Critical Thinking	26.8%	Collaboration	12.2%

In terms of 21st-century skills, Table 6 presents that most of them, just under two-fifths, perceive communication skills as the most important aspect of their study program. Moreover, a little over one-quarter think that critical thinking skills should be placed as the second most important, whereas just over fifth select creativity to be less important than critical thinking. Finally, collaboration is at the bottom of the table with a percentage of 12.2%. As a result, the activities in the developed materials are expected to support the students to improve their 21st-century skills to equip and ensure them to thrive in a world where change is constant and learning never stops.

Students' wants

Learning preferences

Three of the survey's aims are to solicit information about students' learning styles, the use of instructional media, and preferences for learning activities. In this part, they were allowed to choose more than one answer. Table 7 summarizes the percentage of the three aforestated indicators.

Table 7. Students' preferences for learning styles, activities, and instructional media

Learning Styles	Percentage		
Visual	75.6%		
Auditory	43.9%		
Kinesthetic	41.5%		
Instructional Media	**Percentage**	**Learning Activities**	**Percentage**
Videos	87.8%	Discussion	68.3%
Games	63.4%	Role Play	51.2%
Audio	56.1%	Group Work	43.9%
Websites	48.8%	Pair Work	39%
Modules	39%	Project	34.1%
PowerPoint	36.6%	Lecturing	22%
e-Books	29.3%	Presentation	14.6%
		Internet surfing	2.4%

Table 7 shows that three options of learning styles were provided for them to choose from based on what they thought was effective. The top half of the table reveals that just over three-quarters of the respondents prefer the visual learning style. Meanwhile, the difference is almost equally split between auditory and kinesthetic learners, with only 2.4% more of the former giving the auditory a slight

majority. This shows that most of them enjoy learning English visually such as through videos, images, graphics, etc. Nonetheless, they also appreciate learning through audio and hands-on experiences as these are parts of auditory and kinesthetic learning styles.

These results also correspond with the outcome of the instructional media. The bottom left half of the table reveals that more than four-fifths of them favour the use of videos while 63.4% prefer games. As the auditory style places second, the results also coincide with the instructional media in which just over half of them would like the integration of audio in the process. It is then followed by the interest in using websites because 48.8% choose such an option. The most surprising aspect is that the use of modules is preferable to e-books. It is proven by the fact that 39% select modules while 29.3% vote for e-Book. Lastly, PowerPoint places the second bottom just before e-Book with a percentage of 36.6%. Although websites, modules, PowerPoint, and e-books are still selected, the percentage is not as high as the top three media, i.e. videos, games, and audio.

Furthermore, the table also includes information about students' preferred learning activities that need to be incorporated into the academic instructions. The data indicates that a significant number of students (68.3%) choose discussion as the most preferred activity. Likewise, a little over half of them favour role-playing which seems to be part of kinesthetic learning, which is surprisingly recognized as the least favourable style. A closer inspection also reveals that group and pair work are side-by-side, signifying the importance of collaborative learning in the process. A percentage of 43.9 prefer group work while another 39% favour pair work. Besides, the group project is in fifth position, with a percentage of 34.1%. It is not surprising that lecturing and presentation are among the bottom three of the least preferred activities. Finally, internet surfing is only selected by an insignificant amount of around 2%.

From these results, the developed materials should accommodate visual learning without neglecting other types of learning styles as the different types are still chosen. Moreover, the materials should also provide learning activities that students mostly enjoy, such as discussion, role-play, group work, pair work, and class projects. However, other types of activities cannot be ignored as long as they can improve students' English proficiency. To highlight, the most selected activities are expected to facilitate their different learning styles.

Mode of instruction

In selecting the mode of instruction, students were asked to choose only one option. Whereas, for the technology integration, they were allowed to choose as many as eight choices, depending on their preferences. Table 8 presents the percentage of the results.

Table 8. Mode of instruction

Mode of Instruction	Percentage	Technology Integration	Percentage
Blended	61%	Laptop/PC	90.2%
Online	26.8%	Social Media e.g. YouTube	90.2%
Offline	12.2%	Browsing	78%
	100%	Online Apps e.g. Duolingo, Quizizz, Kahoot, etc.	73.2%
		LMS	68.3%
		Online Meeting	46.3%
		English Book	2.4%
		Chat App	2.4%

The results of the students' survey supported the ones from the document analysis and the course lecturer's interview concerning the implementation of blended learning (BL). The data in Table 8 indicates that 61% of the students prefer to use the BL. BL is placed top of the list, with 34.2% more compared to the online mode, making BL the majority. A little over one-quarter of them choose online whereas a small minority of students, 12.2%, vote for offline mode. However, these results are essentially not counterintuitive considering the mode that has been implemented for more than two years due to COVID-19. Thus, they seem to have been used to being in the BL environment. They are no longer interested in having only-offline classes, as proven by the lowest percentage.

However, instead of supporting the BL system that was proposed by the study program (synchronous and asynchronous online learning), they tend to prefer having the combination of BL in the form of offline and online-learning modes. Some of them asserted that the use of BL could accommodate the strengths of each of the modes while in turn covering up each other's weaknesses. In the offline session, the materials could be delivered online. However, when the students needed more assistance with the lesson, in-person learning could facilitate the process more effectively. Besides, the students could be encouraged to practice more when they were in in-person learning.

Likewise, specific technology integration that they would like to use in the process is also found. The data reveals that it is more desirable for them to use laptops or personal computers (PC) and utilize social media e.g. YouTube. The percentage of both of these aspects is equal in which the majority of the students, 90.2%, select these choices. The results are also in line with the findings of students' preferences and instructional media to which visual style is preferable. Moreover, internet browsing is still highly selected by a significant proportion of students, 78%. This is in agreement with the results of instructional media but contradicts the ones from learning activities in which internet surfing is the least preferable. Then, a large proportion of them, 73.2%, choose online applications such as Duolingo, Quizziz, Kahoot, etc. to be incorporated into the process, supporting the findings that games are favoured. Besides, learning management systems (LMS) and online meetings are still selected. LMS is chosen by a large number of students while online meetings are selected by over two-fifths of them. Surprisingly, English books and chat apps are poorly favoured because only an insignificant number of students choose them.

In addition to all of the results, the alumna interview revealed significant findings that support the survey. Commenting on technology integration, the alumna asserted that Google Trends can be incorporated into several topics in the study program such as headlines or journalistic topics for search engine

optimization (SEO). Therefore, students can write a headline of particular news and it can be easily detected in a Google search. It is part of understanding the characteristics of online media that need to be learned. As for YouTube, even if it is not utilized in the classroom, YouTube recommendation videos or channels can be given to help students learn autonomously.

Overall, these results indicate that BL, as in the combination of offline and online, is highly favourable. During the online session, many technological devices can be incorporated into the educational practices such as the use of laptops/PCs, social media, online apps, LMS, and more importantly online meetings. That being said, changing the mode of instructions from offline into a BL approach does not necessarily mean that all applications or platforms need to be entirely integrated. Yet, the decision in their integration should be based on the necessity and their roles in optimizing the teaching-learning process which in turn achieves the objectives of the lesson.

Discussion

The outcomes of this study reveal the CSP students' necessities, lacks, wants, and learning needs that are beneficial for ESP teachers to develop improved English learning materials. To fulfil the demands of teaching English in CSP, those categorized findings proposed by Hutchinson and Waters (1987) are discussed and connected to the learning goals and objectives, materials, activities, equipment, as well as assessment. They were analyzed by comparing the ideal ESP teaching condition with the actual situation and adjoining the 21st-century urgency skills to prepare students after graduating from university in the globalization era.

Incorporating 21st-century demands into materials development

Considering the findings, the researchers attempt to synthesize the first discussion on presenting the goals and objectives that must be provided as the primary teaching-learning activities. Furthermore, various factors are considered while determining them, including the outcome of target needs, students' necessities, lacks and wants. Students' perspectives on 21st-century skills are also included while formulating goals and objectives.

The findings revealed that students intend to learn English to improve their English abilities to have a better career in the future. Some scholars captured the tendency to learn English for future employment orientation. For instance, Dirgeyasa (2018) found that students at Nautical Academy intend to learn English to prepare for their future job. Anam and Rachmadian (2020) also captured the future career orientation in learning English for the Tourism Program. These studies emphasize that the goal of English learning for future career preparation needs to be established, including in CSP.

Furthermore, this current research also gained the needed 21st-century skills possessed by CSP students. Among four skills, students are expected to sharpen their communication and critical thinking skills. This finding, to some extent, enriches the discussion of the presentation of 21st-century skills in CSP. Nevertheless, the two other skills, creativity and collaboration can be utilized to achieve the primary goal of ELT in CSP.

Since the goals of this course are to achieve academic objectives and students' future careers, the text types and topics have to be relevant to the workplace. Previous studies have reported that some of the CSP fields are science journalism, public relations, communication management, marketing communications, broadcasting, and advertising (Bajari, 2017). It is interesting to note that those fields of this study are in line with the student's preferences to learn, they are about mass media, journalism, and mass communication. This finding confirms that the CSP students have an awareness of the necessity of selecting topic materials. Advertisement, reports, narrative and argumentative texts are some of the text types that might facilitate them to obtain a deep understanding of English which is related to those fields. Consequently, those focuses will be suitable to be discussed in the English course materials to give them beneficial insight for their future career and to prepare them for facing the real workplace environment.

This study has found that the majority of students have a visual learning style. Thus, the presented materials need to be visually oriented to facilitate their learning process. Moreover, this need is highly correlated to their most selected topics which are advertisements, video reporting, posters etc. Felder and Soloman (2000) proposed that visual learners have the finest experience in remembering what they see. In line with them, Bogamuwa (2017) also stated that visual learners like to obtain information from visual stimulation. Therefore, providing pictures, diagrams, mind maps, films, demonstrations and other visual representations helps the learners to understand better. Despite the fact that most students are visual learners, the students who have auditory and kinesthetic learning styles cannot be neglected. For auditory learners who tend to have a sense of listening, the integration of audio into the learning process may help them comprehend the content (Ishartono et al., 2021). In addition to avoiding monotonous learning delivery, some of the materials should be delivered by involving other learning styles to give students the opportunity to get a variety of learning. A study has evidence that providing different ways of presenting materials may attract students to actively participate in the course and lead to gaining better experience (Ferrer & Kirschning, 2014). To sum up, all the students' learning styles must be facilitated to achieve successful learning process

In regards to learning activities, the survey results indicated that students' primary activities in English classes include discussion and role-playing. Students can utilize the opportunity of discussion to convey their perspectives by sharing ideas. The involvement in role-playing activities might also provide opportunities for speaking practice. Since a number of studies found the impact of a role-play (Flora & Sukirlan, 2021; Rojas & Villafuerte, 2018) and discussion (Bohari, 2020; Kaharuddin & Rahmadana, 2020; Mohammed & Ahmed, 2021) can enhance the speaking skill. By noticing so, students can be given activities such as discussing both local and international issues as well as doing a simulation in daily activities. Finally, students are expected to learn English effectively and efficiently through the aforementioned activities.

Facilitating 21st-century learning in the Communication Science Program

About the 21st-century demands, teaching and learning, in general, should be continuously updated and upgraded to equip students with the knowledge and skills required to face those demands. Updating and upgrading the existing education process can be done in various ways, such as by providing relevant learning materials and carefully deciding how they will be delivered. The fact that students favour the combination of online learning and face-to-face meetings is interestingly potential based on literature. According to Dakhi et al. (2020), this type of BL is the answer to the weaknesses of each learning mode. When the two modes are combined into a BL, benefits from each can also be obtained. They also mentioned that BL is suitable for 21st-century learning. The potential likely stems from the fact that BL implementation is inseparable from technology integration in education, which is widely associated with the promotion of 21st-century skills. Thus, regardless of the possibility that students' preference for BL is influenced by their experiences during the COVID-19 pandemic, that mode of instruction is potential in itself.

Furthermore, if the CSP is about to address students' wants to implement BL, some adjustments in the equipment such as technological tools needed for the teaching and learning process are inevitable. Nevertheless, switching to BL does not necessarily mean integrating all available applications, websites, or other technological tools. An assumption that technology can be a panacea for all issues in teaching and learning, or what is termed "technocentrism" by Papert (1990), is counter to the idea that technology is supposed to be a means of enhancing teaching and learning instead of being the focus of the process. Thus, the decision on ICT integration should be based on the necessity of the tools and their roles in optimizing teaching and learning. Another consideration is the availability of the technology itself for students. The NA results related to students' favourable technological tools can be used as a reference which indicates the tools available to them. It is crucial to be considered since the digital divide is among the challenges in ICT integration. In addition to the fact that some places do not have adequate internet service, some students still view personal computers and laptops as a luxury, which makes them dependent on mobile devices to assist in learning. Additionally, it has been observed by Suryani and Muslim (2021) that some Indonesian students occasionally skip class during online learning because of the digital divide phenomenon. Although most of the students participating in this research seem to have access to personal computers and laptops, closer examination of the availability of technological tools is needed so that the digital divide will not hinder teaching and learning. In short, any ICT integration in the classroom should be based on the necessity and consideration of available resources.

In addition to previous materials development components, the assessment process also contributes significantly. It is divided into assessment for learning that seeks evidence to decide students' needs, learning that focuses on students' self- and peer-assessment, and learning to determine whether learning has happened (Cheng & Fox, 2017). Consistent with the literature, these results indicate that the assessment process accomplishes its requirements. The formative assessment was provided by giving oral quizzes, written tests, vocabulary-building tasks, and text

recognition. Conversely, the summative assessment can be noticed when learners were given mid-term (UTS) and final-term (UAS) tests. However, the detailed information about the activity in the UTS was not clearly stated and the UAS assignment was only to concentrate on written skills through an opinion essay task. Ideally, the assessment process integrates the entire English skills (Brown & Lee, 2015) and facilitates learners to receive valuable knowledge, give their mastery records, and help them self-monitor (McMillan & Turner, 2014). Contrary to expectations, the result indicates that speaking and grammar skills are less promoted. That is, the assessment elements require the main improvement on its skills-based assessment specifically on the English spoken and structured abilities as well as 21st-century skills.

Conclusion

The present study suggests that some considerations need to be taken into account in designing ESP learning materials including determining students' learning needs, lacks, necessities, and wants. These aspects are crucial because they are linked to the basic requirements of an effective English course, such as learning goals, language skills, learning materials, learning preferences, learning media, and mode of instruction.

It is found that student's learning needs focus on the desire to improve their English proficiency, mainly for future career orientation. This desire is also reflected in their lack of speaking and grammar. As the career fields of CSP graduates resonate with mass media, journalism, and mass communication, the ability for language production, especially through spoken language, becomes significant. On an important note, grammar is also one of the underpinning skills in speaking, resulting in a substantial correlation between both. Therefore, the goals of the course should be designed by focusing on these skills to facilitate students with the necessary linguistic and communicative competencies to strive in the field. Moreover, ESP materials should be compiled with text types around the field to support the achievement of the goals. The texts include but are not limited to, advertisements, reports, and narrative and argumentative (opinion) texts. Furthermore, the principles of ELT and materials adaptation ought to be based on Bloom's Taxonomy and should promote all 21st-century skills in general, as well as communication and critical thinking in particular.

These materials should be actualized in activities that can accommodate three learning styles, namely visual, auditory, and kinaesthetic, with an emphasis on the first one. That is to say, learning media such as videos, games, and audio can be used. Besides, it is also suggested that the classroom delivery model is in the form of BL. In carrying out the BL, then, ICT needs to be integrated into the activities. For instance, PCs/laptops can be utilized to watch videos on Youtube, browse materials on the internet to self-study, and play games on platforms such as Quizziz and Kahoot. To highlight, the decision in the integration of those ICT tools should be based on the necessity and their roles in optimizing the teaching-learning process. Finally, assessment rubrics should be clearly defined to ensure the achievement of the graduate learning outcomes.

It is unfortunate that the study did not include a wider scope of participants. Therefore, it is recommended that further research be conducted to investigate the CSP needs from a broader context. To see the more relevant needs regarding the 21st-century era, the study could be repeated by examining the perspectives of alumni and user companies. Developing ESP materials as the results of NA is intriguing and could also be usefully explored.

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