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Need Analysis Of ESP Material for Fish Hatchery Technology Students

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Abstract

The procedure for choosing teaching materials consists of deciding on, modifying, and assessing instruction based on the unique needs of the learner. This study's objective is to offer the highest-quality English material feasible for Fish Hatchery Technology students of Politeknik Bombana. This study is carried out in Politeknik Bombana. 75 students and 5 lecturers of the Fish Hatchery Technology study program are participating. The information is presented as qualitative data gathered from an interview with students and lecturers as well as a questionnaire that covered relevant subjects and instructional strategies. The results show Fish Hatchery Technology's students' need for ESP in a broad range of subjects. The most popular subjects include fisheries entrepreneurship, fish anatomy, and the physiology of fish and their reproduction. Additionally, from the lecturers' viewpoint, they believe that students' communication and writing abilities need to be well-developed in order to support their profession and advance their careers as fish hatchery experts, fish hatchery managers, fish hatchery supervisors, laboratory analysts, nutrition and fish feed specialist, etc. The analysis of the conclusion highlights the significance of ESP for students studying fish hatchery technology.

Keywords: ESP, Need Analysis, Fish Hatchery Technology

1. Introduction

Due to ESP's ability to deliver more sophisticated, specialized, and academic content that complements the study curricula selected by students, especially in circumstances where higher education students are prepared to function in the workplace, the need for cutting-edge in Indonesia, ESP enrollment has lately surged (Kusni,2013). Regarding the instruction of English as a second language, many professionals have shared their thoughts on the fundamental premise of ESP. According to Kusni (2013, p. 37), all are classified in ESP. Empirically, a number of researchers have noted that the application of the Needs Analysis carried out prior to the program is crucial to the effectiveness of the instructional activities in ESP. An effective learning system and method must be developed after doing a need analysis (Kusni, 2013; Poedjiastutie and Oliver, 2017; Rokhyati, 2013).

Numerous researchers have studied the comparison of the ESP demands for different study programs in Indonesia, including Susandi & Krishnawati (2016) on nursing students, Diana and Mansur (2018) on ICT students, and Parnawati & Ulinuha (2019) on the necessities for University-level English. The fact that everyone in the Fish Hatchery Technology study program is now learning standard English has no effect on the students' foundational abilities for their planned careers. As a result, examining ESP requirements among students studying fish hatchery technology, the current study advances our understanding of the topic.

This study was designed to develop the optimal objective, subject matter, and learning techniques that are employed in each specific study program to assist students in acquiring the English language proficiency they will need in the future. ESP for the Fish Hatchery Technology study program has not yet been covered in any research, either at the level of syllabus design or need analysis. The fact that everyone in the Fish Hatchery Technology study program is now learning standard English has no effect on the students' foundational abilities for their planned careers. Kusni (2013) asserted that "ESP rather than EGP should have been offered to students in college or higher education. Authorities in higher education should assert that ESP should take the role of EGP, the long-standing method of teaching English Indonesian universities. As a result, examining ESP requirements among students studying fish hatchery technology, the current advances our outstanding of the topic.

Based on the aforementioned circumstances, the researchers thought it was essential to investigate how students at Fish Hatchery Technology evaluate their English proficiency and to identify the subjects that should be covered in ESP classes for Fish Hatchery Technology students. The goal of the study is to assist ESP instructors in Indonesia in locating excellent teaching strategies and English-language resources that are appropriate for the students at Fish Hatchery Technology. The findings of this study's Need Analysis will serve as the foundation for developing the syllabus.

The distinction of ESP, English for Academic Purposes (EAP), and English for Occupational Purposes (EOP) is important since it will equalize the exclusivity built into ESP. English as a second language (EAP) is a phrase that refers to a course created to support students in developing their academic English language abilities. English for occupational or professional reasons, on the other hand, is referred to as EOP (Kusni, 2013). The ESP class succeeds as a result (Lee, 2016, p.97)." As a result, it can be said that requirements analysis is one of the tools used in the creation of learning materials, which also includes setting goals and structuring course content. Analyzing needs can help teachers keep track of information about the abilities that pupils have acquired and those that they wish to enhance and improve. Need assessment entails a number of steps, including the data collection on the perspectives of the need of learners, hopes, and viewpoints (Lee, 2016). As a result, for the benefit of aims and goals for learning, detailed information on resources, methods, and the learning environment is thoroughly obtained (Boroujeni & Fard, 2013).

2. Method

The methodology of triangulation research was adopted in this study, utilizing quantitative and qualitative techniques, to focus on the analysis of the ESP needs of learners studying Fish Hatchery Technology. The quantitative technique was used to collect data from all respondents (students studying fish hatchery technology) and to discover more about the lecturers' expectations, and the qualitative approach (an interview) was used for the future usage of English in fish hatchery

technology. Data can be divided into two categories: quantitative and qualitative. The questionnaire responses from the chosen participants were employed to get the numerical data. The participants received the questionnaire. To gather qualitative data, interviews with a few of the research participants were conducted. Data for this study was gathered through surveys and interviews with people who were qualified to speak on the subject. The aim of the survey is to find out more about the attitudes of the respondents, behaviors, convictions, and arguments on the importance of English language proficiency in a higher education environment (Cohen, 2015).

3. Result and Discussion

Result

1. Language and Personal Information about Students

Using a questionnaire with particular questions to address the difficulties mentioned, language proficiency and personal information about the students were assessed.

Table 1. Individual Profiles of the Respondents

			Frequency	Percentage
1.	Gender	Man	35	47%
		Woman	40	53%
2.	Age	19 – 22	47	63%
		23 – 26	12	16%
		27 – 30	8	11%
		31 – 34	4	5%
		35 – 38	4	5%
3.	Has passed English Subject	Yes	67	89%
		No	8	11%
4.	Make an effort to get better English	Yes	50	67%
		No	25	33%
5.	Use of English outside of the classroom	Not at all	21	28%
		1 – 2 hours	40	53%
		4 – 5 hours	12	16%
		More than 5 hours	2	3%

Between the ages of 19 and 38, 47% of respondents were men and 53% were women. The majority of them (63%) are aged between 19 and 22; 12 (16%) are aged between 23 and 26; 8 (11%) are aged between 27 and 30; 4 (5%); and the remaining 5% are between the ages of 31 and 34. In their individual academic programs, almost all of them had passed the English component; nevertheless, the 8 respondents (11%) did not. Only 50% of the respondents said they are motivated to work on improving their English, which is a concern. A little number of respondents 3% who more than five hours a week are spent improving their English abilities also reflects a lack of effort and motivation. It is startling to learn that 28% of respondents say they never practice their English outside of class. The explanation of how respondents felt they were proficient in English was given after this personal information.

Table 2. The English proficiency level of Fish Hatchery Technology students

Competency	Very weak	Weak	Good	Very good

Speaking	29 %	53%	13%	5%
Listening	48 %	42%	10%	-
Reading	16 %	26%	44%	14 %
Writing	15 %	20%	47%	18%
Grammar	28 %	52%	20%	-
Vocabulary	30 %	56%	14%	-
Pronunciation	40 %	48%	12%	-

Information in Table 2 reveals how confidently students can name their speaking, listening, grammar, vocabulary, pronunciation, and writing fundamental English competencies. However, only 5% of learners said they had excellent speaking abilities, compared to 13% of respondents who said their speaking ability is good.

With a total of 86%, the students overwhelmingly said in the table above that their vocabulary mastery is subpar. The remaining respondents (14%) thought their command of terminology was good. However, none of the students checked the "very good" box. The majority of respondents said, on average, that their listening skills are poor, with the "good" category receiving the lowest percentage of responses. As a result, it is considered that most pupils lack confidence in their ability to listen.

Overall, the results are comparable to those on reading ability. As a result, it can be concluded that respondents' writing skills are just as convincing as their speaking and listening abilities. The study identified five primary objectives for Fish Hatchery Technology students as they near graduation.

The distribution of the students' desired professions is shown in the table below.

Table 3. Students' Objectives in Fish Hatchery Technology

Profession or Occupation	**Number of students**	**Percentage**
Fish hatchery manager	7	9%
Fish hatchery expert	20	27%
Fish hatchery supervisor	5	7%
Fishery technician	8	11%
Laboratory analyst	5	7%
Nutrition and fish feed “specialist”	2	3%
Entrepreneur	28	36%

The distribution of the different job types desired by respondents who are majoring in Fish Hatchery Technology is shown in Table 3 above. Entrepreneurs and fish hatchery specialists garnered the most responses from the sample. 36% of all respondents said they aspire to start their own business, and 27% said they are fish hatchery experts. The remaining respondents are divided into the following categories: nutrition and fish feed specialist, laboratory analyst, fishery technician, fishery manager, and fishery supervisor. The majority of students choose teaching as their primary career path.

2. The topics needed in ESP for Fish Hatchery Technology students

The preferences of the lecturer and students (in percentage terms) for a number of fish hatchery-related topics are shown in Table 4 below.

Table 4. Topics that lecturers and students prefer

Topics	Student	Lecturer
Fish anatomy	90%	100%
Physiology of fish and their reproduction	90%	90%
Process of brackish water fish hatcheries	80%	100%
Process of seawater fish hatcheries	80%	100%
Fresh water and ornamental fish farming	70%	90%
Fish nutrition	80%	100%
Pets and fish diseases	80%	100%
Fisheries entrepreneurship	100%	100%

These results are consistent with research on students' occupational aspirations. The fact that not all students have advanced levels of English proficiency makes it a challenging topic (see Table 2), but It is regarded as a milestone for the study of ESP offered to students studying fish hatchery technology. Additionally, this ability will be crucial to their success as a fish hatchery specialist. Students show a reasonable amount of interest in the process of hatchery for brackish water and seawater fish, fresh water and ornamental fish farming, fish nutrition, pets, and fish diseases; nevertheless, different lecturers' reactions to their existence.

The curriculum of Fish Hatchery Technology students

The author bases the creation of the creative syllabus on a learner-centered approach. This method was also used to communicate consisting primarily of an ESP module. The design then emphasizes the unique learning requirements that students studying Fish Hatchery Technology have. Additionally, an essential component of gauging students' achievement is assessment. Performance-based assessments and instructor feedback can be used to get this. The evaluation attempts to provide a more in-depth look at how well the subjects and teaching methods perform in actual classroom situations.

When it comes to students studying fish hatcheries, these students are given materials that integrate real-world situations, their working environment as a manager, an expert, or a supervisor of a fish hatchery, a fishery technician, a laboratory analyst, a nutritionist who specializes in fish feed, or an entrepreneur. The difficulty in creating a suitable syllabus and material within the suggested time frame is due to the short duration of each meeting. The results of this study indicated that students' levels of English proficiency need to be raised (see Table 2). Students acknowledged that their speaking ability is inadequate, with the majority of responses being that it is poor.

Discussion

Among the seven abilities evaluated by the questionnaire, reading comprehension and writing ability were found to be the students' strongest areas in terms of English competence. These results support Susandi and Khrisnawati's (2016) research, which showed that EFL students often had stronger reading skills than non-EFL students. Additionally, according to Choi, Moon, Paek, and Kang (in Parnawati & Ulinuha, 2019), they stated that writing and reading comprehension skills are inextricably linked. These two abilities are so complementary to one another. This result backs up Diana and Mansur’s assertion (2018) that EFL students are more motivated to develop writing skills than other skills. Students prefer writing, but they lack confidence in their grammar abilities. This outcome corroborated Ulum's (2015) study's conclusion that listening is an underutilized skill in EFL environments. Additionally, this discovery confirmed a suggestion that speaking and listening abilities are closely associated (Parnawati and Ulinuha, 2019).

Most respondents selected themes that support their intended “careers” when asked about the subjects that students and the teaching staff of the Fish Hatchery Technology study program wanted

to learn about. This proved that EFL students appreciated the importance of English ability for their future careers (Parnawati and Ulinuha, 2019). The students opted for English classes since they believed that they were crucial for careers as fishery technicians, laboratory analysts, nutrition and fish feed specialists, fish hatchery experts, managers, supervisors, and business owners. The assertion that English courses offered at the university level do not enhance students' careers as professionals is further backed by Milaningrum and Rahmawaty in (2019). Finally, a lot of students mentioned that they aspire to become fish hatchery entrepreneurs and experts in the future, which calls for strong writing and speaking abilities

4. Conclusion

The inference that may be made from the findings above is that the majority of Politeknik Bombana students studying fish hatchery technology believed that their English language proficiency was subpar. Students are more confident in their reading comprehension and writing skills than they are in their speaking and listening abilities when it comes to the fundamentals of the English language. According to this study, the majority of pupils value writing abilities above all others. It's interesting to see that they think their grammar is poor yet want to learn more about writing. As a result, students also need to thoroughly understand grammar. Additionally, students think that having an understanding of English will help them in their future careers.

5. Suggestion

The study's findings and analysis covered the elements that need to be changed in relation to teaching English for Specific Purposes as a discipline to students studying fish hatchery technology in a university setting. In addition to the lecturer or practitioner, future researchers will also profit from this study's advantages.

1. When creating instructional materials, lecturers and practitioners must consider students' language abilities. In addition to improving students' strengths, flaws should be addressed.
2. ESP instruction involves teaching students in a way that prepares them for their future positions. Therefore, the chosen subject should address the difficulties associated with the work and tasks of a fishery technician, a laboratory analyst, a nutrition and fish feed specialist, a fish hatchery expert, a fish hatchery manager, a fish hatchery supervisor, and an entrepreneur.
3. The results of this investigation should improve the ESP curriculum and teachings for students studying fish hatchery technology.

This research can be used as an important reference by present and future researchers, teachers, and practitioners to improve the curriculum and materials for university-level students studying English for Fish Hatchery Technology and to hasten the development of ESP for fish hatchery technology students. This research can be used as an important reference by present and future researchers, teachers, and practitioners to improve the curriculum and materials for university-level students studying English for Fish Hatchery Technology and to hasten the development of ESP for fish hatchery technology students.

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