Joanna Niemiec

NEEDS ANALYSIS FOR A SPECIALIZED LEARNER POPULATION: A CASE STUDY OF LEARNERS FROM MEDICAL COLLEGE

Analiza potrzeb językowych studentów medycyny uczęszczających na lektorat z języka angielskiego specjalistycznego
Analiza potrzeb językowych osób uczących się odgrywa istotną rolę w przygotowywaniu i opracowywaniu kursów językowych oraz lektoratów z języka specjalistycznego. Jest ona także ważnym źródłem informacji umożliwiającej interpretację problemów i oczekiwań uczestników zajęć. Wyniki analizy pozwalają na lepsze poznanie biegłości językowej docelowych odbiorców oraz dalsze rozwijanie ich umiejętności w komunikowaniu się. Niniejszy artykuł przedstawia wyniki ankiety przeprowadzonej wśród studentów Wydziału Lekarskiego Uniwersytetu Jagiellońskiego – Collegium Medicum. Celem było określenie potrzeb studentów uczących się języka angielskiego specjalistycznego. Badanie uwzględnia czas nauki języka, opinie o tym, jak ważna jest nauka języka angielskiego specjalistycznego w przyszłej karierze zawodowej, samoocenę trudności w uczeniu się (obszary oraz braki językowe wymagające dalszej pracy, trudności w opanowaniu konkretnej umiejętności językowej, sposób oraz zakres poprawy umiejętności), sugestie tematów, jakie powinny się w opinii studentów znaleźć w sylabusie, ocenę stylów uczenia się oraz stylów nauczania przez lektorów i wykładowców. Wyniki badania pokazują, że nauka języka angielskiego specjalistycznego jest istotna dla studentów, i pozwolą na opracowanie sylabusa, który będzie uwzględniać konkretne potrzeby językowe w kontekście dyscyplin medycznych oraz przyszłej pracy zawodowej.
Słowa kluczowe: analiza potrzeb, język angielski specjalistyczny, studenci medycyny

1. Introduction

According to Dudley-Evans and St John (1998), needs analysis is "the corner stone of ESP and leads to a very focused course" (Dudley-Evans and St John, 1998, p. 122). It is an on-going process which allows the language instructors to revise the syllabus, determine students' progress and evaluate effectiveness of teaching methods and strategies. Consequently, the teachers may implement techniques to facilitate the learning processes and meet the needs of the learners.

Students of the Medical Faculty at the Jagiellonian University Medical College are taught EMP (English for Medical Purposes) to attain specific goals. The course is intended to teach them medical vocabulary and terminology and to master the ability to communicate in English in a hospital or clinical setting. Depending on the faculty, the course lasts between 120 to 240 hours and is terminated with a final exam. The syllabus is prepared by a coordinator in cooperation with other teachers. Although the introduction of modifications into a course content is limited by various factors such as university authorities, didactic guidelines imposed on teachers by experts or a text book material, it is possible to make changes that increase the effectiveness and attractiveness of ESP classes. The teachers may apply techniques and strategies to enhance learning processes and meet the expectations of the learners.

To find out what are the current needs of my students, I conducted a study. Presentation of the data includes students' (1) educational background (2) opinions on the importance of English language use in their future workplace, (3) self-assessment of difficulties in learning English (weaknesses and lacks; difficulties in mastering particular language skills, the way and extent of improving the skills), (4) suggestions for topics which, in their opinion, should be included in the EMP syllabus, (5) evaluation of learning and teaching styles. The paper concludes with recommendations presented according to the results obtained.

2. Theory

2.1. Different definitions of "needs"

There are various definitions of needs representing a different educational value but all take the learner as a focus of analysis. The following is a review of major definitions of needs according to different scholars.

2.1.1. Target needs and learning needs

Both Hutchinson and Waters (1987) offer two concepts of needs: target needs and learning needs. Target needs refer to learner's necessities, lacks and wants. That is what the learner needs to do in the target situation. Whereas learning needs concern learners' motivation to study a foreign language, future career, interests, and time available. In other words what the learner needs to do in order to learn.

2.1.2. Target needs

Target needs is an umbrella term that includes necessities, lacks and wants (Hutchinson and Walters 1987). Necessities are the type of need determined by the target situation. That is what the learners have to know to perform successfully in the target situation. For medical learners, for example, they should master reading skills in scientific papers, journals, magazines and books; the writing skills in emails, medical documents, reports, conference abstracts and articles. The oral skills such as telephoning, taking a patient history, giving a physical examination and using general English language skills for everyday communication. To gather the information presented above, a target situation analysis (TSA) should be carried out by the teachers. The analysis involves examination of the target situation that is determination of the learners' skills, knowledge involved and the types of tasks the learners need to do in order to attain a particular purpose. This information is relatively easy to collect. The teachers' task is to observe what situations the learners need to function in and then analyse the integral parts of them. These observations may be used as a starting point for designing a syllabus. Subsection 2.2.3. presents more information on TSA.

To identify the necessities alone is not enough since the needs of particular learners are important in successful language teaching. It is essential to find out what the learners already know and what they need to know to be able to complete the tasks. In that case, the lacks represent the discrepancy between the required proficiency in the target situation and the existing proficiency of the learners (Hutchinson and Waters, 1987, p. 56). This in turn involves a present situation analysis (PSA) where the teachers evaluate the learners and determine what language skills they lack. Commonly, diagnostic tests are used in this type of analysis. Subsection 2.2.4. discusses PSA in detail.

Hutchinson and Waters (1987) definition of target needs stresses allowing the learners to have their own perception of their needs. In that context, wants refer to the learners' idea of what they want and need to comprehend and produce. The learners may be perfectly aware of their necessities and lacks in the target situation, however, it might happen that their views are in conflict with that of the teachers. That is why the ESP practitioners should find out what learners expectations are towards language courses. In that case a learning situation analysis (LSA) is necessary. This process allows to identify how the learners learn the language best, what resources are available to facilitate their learning and what teaching styles are preferred by them. Subsection 2.2.5. provides more detailed information on LSA.

2.1.3. Learning needs

According to Hutchinson and Waters (1987), it is unrealistic do create a course design solely on the target objectives just as it is unrealistic that a journey (the ESP course) can be planned solely with regard to the starting point (lacks) and the

destination (necessities). The needs, potential and constraints of the route that is the learning situation should be taken into consideration. Learning needs explain how the learners are able to make progress from the starting point (lacks) to the destination (necessities). For example, the learners may be highly motivated in the subject because they may like the subject teacher or examination session is coming soon, but their willingness to participate in classroom activities may be completely lost when they are given long and boring texts. In other words the learners' motivation in the target situation may not necessarily transfer to the ESP classroom. According to Donesch-Jeżo (2011), every experienced teacher can notice that the problem with motivation in the classroom arises when a negative tension and/or boredom starts to dominate over joy and interest in the task being performed, which leads to inevitable dissatisfaction and, in consequence, to demotivation. It means that learning process should be enjoyable, and at the same time effective.

Figure 1. Hutchinson & Waters' (1987) Classification of Needs Analysis
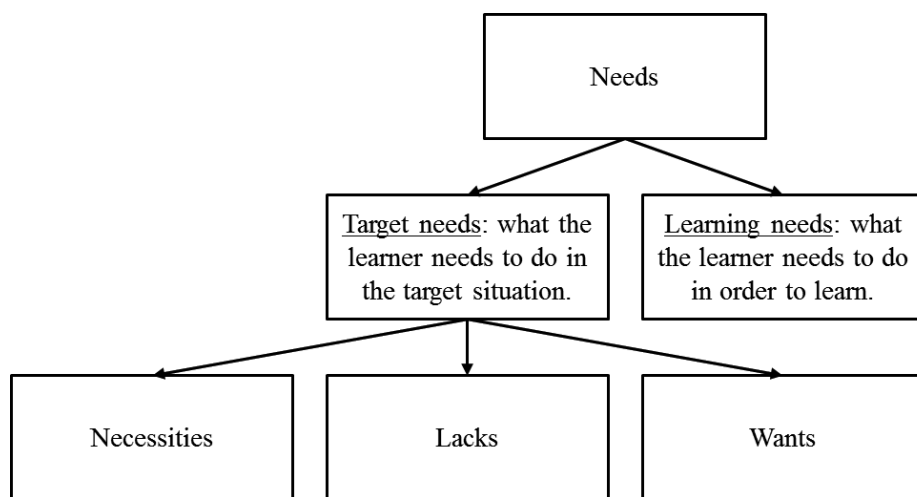
2.1.4. Needs classification from outsiders and insiders viewpoint

Dudley-Evans and St John (1998) argue that if needs are derived by outsiders from facts, from what is known and can be verified then they are classified as objective and perceived needs. For example, if the learners learn English because they want to complete the language course in order to get a language certificate, then their needs to learn English are seen as objective and perceived. On the other hand, if needs are derived by insiders and correspond to cognitive and affective factors such as "to be confident" then they are classified as subjective and felt needs. The authors further state that "(…) product-oriented needs derive from the goal or target situation and process-oriented needs derive from the learning

situation" (Dudley-Evans and St John, 1998, p. 123) thus a target situation analysis (TSA) encompasses objective, perceived and product-oriented needs, while a learning situation analysis includes subjective, felt and process-oriented needs.

2.1.5. Objective and subjective needs

Brindley (1989) makes a distinction between objective and subjective needs. Objective needs can be diagnosed by teachers following the analysis of learners' personal data including information about their educational background, current language proficiency and difficulties in foreign language learning. The analysis may also involve examination of the target communicative situations in which the learners participate and types of spoken and written discourse they have to understand and produce. This factual information may be used as a way to identify objective needs. In contrast, subjective needs, refer to "the cognitive and affective needs of the learner in the learning situation" (Brindley, 1989, p. 69) and can be derived from the data on affective and cognitive factors. These factors include the learners' wants, desires, expectations, personality, self-confidence or other psychological manifestations. However, these factors cannot be identified as easily or even recognized by learners themselves which can be attributed to "elusive nature of the variables" (Brindley, 1989, p. 70).

2.1.6. Learner needs

Widdowson (1983) argues that learner needs is a concept which offers two distinct interpretation. On the other hand it may refer to what the learners need to do once they mastered the language. This is a goal-oriented definition of needs. On the other hand it may refer to what the learners need to do to learn the language. This is a process-oriented definition of needs. Briefly, a goal-oriented definition of needs concerns the ends of learning and involves syllabus aims, while a process-oriented definition of needs relates to the means of learning and has to do with pedagogical objectives (Widdowson, 1983, p. 20). The above interpretation of learner needs empathizes the importance of assessing the learner's level of English language proficiency and evaluation of the target situation where it is necessary for the learner to use the language in practice.

As it was stated at the beginning of this section, there are various definitions of needs. This implies that in order to identify learners' needs, the teachers are advised to conduct needs analysis. The results would help to diagnose the current language proficiency of the learners and introduce changes into the syllabus.

2.2. Needs analysis

2.2.1. What is needs analysis?

Needs analysis is a process which allows to find out what skills and knowledge learners need to have to be able to master a foreign language. According to West (1997), the term first appeared in India in the 1920s and referred to learning

General English. The term did not gain its prominence until around 1970 when its return is closely related to the development of ESP. And since the scope of the ESP concept has changed, as a result the notion of needs analysis has evolved.

2.2.2. Components of needs analysis

There are various components of needs analysis put forward by researchers. However, the majority of researchers agree that a target situation analysis (TSA), a present situation analysis (PSA) and a learning situation analysis (LSA) constitute integral parts for assessment of learners' language needs.

2.2.3. Target situation analysis

Munby's model is generally perceived by the ESP teachers as a means to conduct a target situation analysis (TSA). Namely, a kind of needs analysis which centres around learners' needs at the end of a language course (Robinson, 1991). The target needs are a result of this analysis. The Communication Needs Processor (CNP), which is a central part of the model, consists of eight variables within which information on the learners' target situation can be obtained. The variables include: purposive domain (ESP classification), setting (the time and place), interaction (student-student, student-lecturer), instrumentality (medium of communication and channel of communication), dialect (the dialects which the learners will have to comprehend and produce), target level (level of linguistic proficiency), communicative event (what the learners will have to do with English), and communicative key (the way in which communication needs to be performed) (Munby, 1978). The processing of eight parameters provides a profile of needs (Figure 3), which constitutes a presentation of what the learners, the participants, will be able to do with the language at the end of the course.

Figure 2. John Munby's Model of Needs Analysis Communication
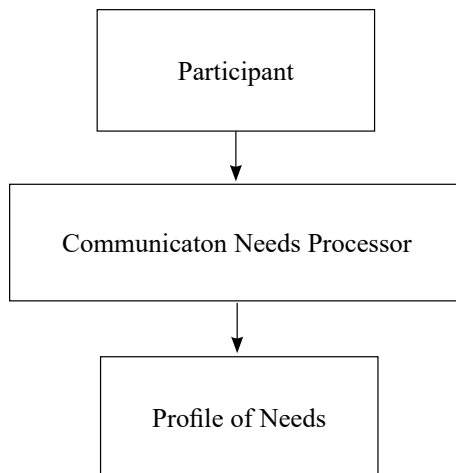
It seems that the instrument proposed by Munby enables the course designers or teachers to establish accurate characteristics of an individual language learner. On the other hand, Dudley-Evans and St John argue that although Munby's gives detailed lists of microfunctions, he fails to prioritize them or any of the affective factors which today are considered essential (Dudley-Evans and St John, 1998, p. 122).

2.2.4. Present situation analysis

A target situation analysis (TSA) centres on the learners' needs at the end of a langue course, while a present situation analysis (PSA) focuses on what the learners already know at the beginning of a language course taking into consideration their strengths, lacks, and weaknesses. In other words, it attempts to identify what the learners are like at the start of the course. PSA is usually conducted through established placement tests. Also, background information on the learners cannot be ignored. It is very important at this stage of analysis to gather information on the learners' social and educational background, age and occupation, the gap between the current and target proficiency, preferred learning and teaching styles, availability (time constraints) aptitude for learning and motivation to learn the language. McDonough (1984) argues that PSA involves "fundamental variables," which must be taken into consideration before conducting a target situation analysis. In practice, needs analysis may be perceived as a combination of TSA and PSA since seeking information concerning both analyses usually takes place simultaneously.

2.2.5. Learning situation analysis

According to Dudley-Evans and St John (1998), a learning situation analysis (LSA) gives information on the learners' subjective or felt needs. It also concerns the learners' process-oriented needs that is their idea of language learning, what their best strategies, techniques of learning a foreign language are. To analyze learning needs (the term is discussed in section 2.1.), Hutchinson and Waters (1987, pp. 62–63) propose a target situation analysis framework that consists primarily of the following questions:

- why are the learners taking the course?
- how do the learners learn?
- what resources are available?
- who are the learners?
- where will the ESP course take place?
- when will the ESP course take place?

The concept of analysis of learning needs proves to be useful, since it attaches importance to the whole process of learning. Also, it provides the ESP practitioners with an opportunity to analyze the learners' learning needs according to their existing knowledge and skills, the conditions of the learning situ-

ation and motivation. An-ongoing collection and processing of information on the needs gives a vital source of information which, in turn, may serve as a basis for designing a language course that will meet the needs of a particular group of learners.

3. Study

3.1. Student's needs analysis in practice

Taking into account the importance of needs analysis, I decided to conduct a study which aim was to reveal students' necessities, lacks, wants and learning needs. I hoped that the study would shed light on the reality of EMP classes. Correspondingly, the questionnaire included questions on choices ranging from the traditional to the modern learning and teaching style preferences. The aim was to identify which approaches are best for the students to facilitate their learning processes. The data obtained from this investigation may enable the teachers to evaluate their teaching methods and choose the appropriate techniques to meet the students' learning needs.

3.2. Material and data collection method

The respondents who participated in the study conducted in October 2015 for the purpose of obtaining information on their learning needs, were 40 students of the Medical Faculty at the Jagiellonian University Medical College. The research group included: (1) 16 third-year students, and (2) 24 fourth-year students of the same faculty. Both male and female students were among the respondents and the age range was between 21 and 23. The language proficiency of the respondents was intermediate and upper intermediate which corresponds to the CEFR levels B1 and B2 respectively.

The instrument used as a diagnostic tool was a questionnaire which was an adaptation of a questionnaire by Busch, *et al*. (1992) intended to survey the needs of students at Kanda University of International Studies. Some of the questions were modified and adjusted to reveal target information based on the goals of the study. Four questions were added to obtain more comprehensive data. The questionnaire designed for the students included both closed- and open-ended questions which were tailored to elicit information on their immediate and long-term needs. Most questions were closed-ended since open-ended responses could have produced complex answers and thus lead to numerous interpretations and undermine the validity and reliability of the results collected (Serafini, Lake and Long, 2015, pp. 11–26). The students were asked to write their answers to open-ended questions in English and to mark closed-ended questions using a three-stage rating scale. The quantitative findings are presented in Appendix 1. For better interpretation of data, the results obtained from the 3rd-year and 4th-year students are

introduced in one table. Before collecting the data, I pretested the questionnaire on 5 students from my target group. The representatives were invited to complete the questions in the same way that they would complete it in an actual project. Having found that the questionnaire is clear and understandable, I distributed it among the students during the classes. The participants filled it in within 25 minutes. 40 answer sheets were collected, however, 1 of them turned out to be invalid since not all answers were provided.

3.3. Results

The majority of students (70%) have been learning English for over 16 years. One would expect that after years of learning English their levels of proficiency would be higher than B1or B2. This situation may be related to their previous educational experience received at school. Polish schools offer exam-oriented education which focuses on the preparation of learners for tests and seems to fail to include their long term-learning needs.

3.3.1. Necessities

The analysis of data reveals that the target situations in which the students will use English in the future are: communication with foreign language-speaking patients, healthcare professionals and specialists, participation in international medical conferences, meetings and international internships, reading scientific papers, magazines and journals, writing medical documents, reports, publications, giving presentations, using medical software programs, training and working abroad. These correspond to the topic suggestions, which in students' opinion, should be included in the EMP syllabus in order to help them meet their target needs. The list of areas include (according to the 3rd-year students): reading medical literature, conducting research on various diseases and conditions, guidelines for writing abstracts and medical publications, communication with patients, taking a patient history, revision of grammar, discussing medical breakthroughs and discoveries, new treatment approaches, introduction of new terminology for health professionals (according to the 4th-year students), and learning General English. 25% of the 3rd-year students and 10% of the 4th-year students do not suggest any changes in the current syllabus.

3.3.2. Lacks

Both groups of students feel that they weakest skill is speaking. The substantial majority of the 3rd-year and 4th-year students marked the following areas as problematic:
- using a variety of grammatical structures in communicative activities,
- using a wide range of vocabulary in speaking and writing,
- understanding spoken description or narrative,
- expressing opinions in a clear and comprehensive way,

- understanding different accents,
- recognising individual words.

The 4th-year students have almost two-fold greater problems with giving oral reports and short talks including expressing their own opinions. Consequently, in students' view, improvement of speaking skills should be a teaching priority. In contrast, the least problems both groups have are with spelling, reading carefully to understand all the information in a text and the main idea of a text.

3.3.3. Wants

The analysis shows that both groups of students prefer when the teachers apply strategies and techniques developing interactive skills such as working with other students in pairs and small groups, learning in a friendly environment with teachers facilitating and encouraging learning processes. Also, the study reveals that the students favour modern teaching and learning approaches including the use of tapes/CDs/Video films in the classroom, discovering answers to the problems by themselves and having choice and voice in what they want to learn. A decisive majority of students like when the teachers explain unknown material in English, although 50% of the 3rd-year students want the teachers to use Polish when clarifying unfamiliar words. This may be explained by the fact that some specialized vocabulary may be too difficult to understand if explained in a foreign language. More students of the 3rd-year favor translation exercises and when they can chose a partner to work with. Also, they prefer when the teachers walk around the classes, help individual students and correct their mistakes immediately. Dominating the class activities by the teachers and correcting students' mistakes anonymously is strongly objected by both groups of students.

3.3.4. Learning needs

The students' desire to improve their weakest skills is very strong since the majority of respondents will use English in their future career and workplace. 60% of the 3rd-year students will have a continuous contact with a foreign language. This suggests that learning English for their prospective employment is their main motivation. Interestingly, 30% of the 3rd-year students and 25% of the 4th-year students consider working abroad.

3.4. Conclusions and recommendations

Needs analysis is a useful tool which provides vital information on learners' needs, preferences and expectations. This is very important since it helps the teachers to identify what kind of activities, methods, styles and strategies are preferred by the learners. The data gathered in this way may serve as a starting point to write a syllabus framework which may in turn ensure that the ESP classes will be effective, practical and realistic. Trying to design a language course which

meets the needs of the learners is not an easy task, nevertheless introduction of changes may prove to be satisfactory both for the students and the teachers.

Considering the results of the questionnaire, the following recommendations can be taken into account by the teachers.

Teachers are advised to:

- conduct needs analysis which can provide them with student profiles and allow them to design an effective and productive course,
- consider student input in syllabus design (a learner-centred approach),
- identify factors which may affect the way students learn such as previous learning experiences, expectations and motivation,
- accommodate students learning needs when selecting materials and activities (communicative activities and tasks practised in pairs or small groups, expanding vocabulary),
- apply modern teaching methods,
- facilitate learning process through friendly atmosphere.

Appendix
Needs analysis student questionnaire

1. How long have you been learning English?		
2. To what extent do you expect to use English at your future work?		
	3rd year (%)	**4th year (%)**
Never	0	0
Rarely	0	0
Sometimes	18.7	25.0
Often	37.5	45.0
Continuously	61.8	30.0
3. In what situations do you expect to use English at work?		
• Communication with foreign language-speaking patients, healthcare professionals and specialists. • Participation in international medical conferences/meetings. • Participation in an international internship. • Reading scientific papers, magazines, journals. • Writing medical documents/reports/publications. • Giving presentations. • Using medical software programs. • Training and working abroad.		
4. What is your weakest area of English?		
	3rd year (%)	**4th year (%)**
Listening	12.5	25.0
Speaking	56.2	59.0
Pronunciation	15.5	36.0
Writing	12.5	25.0

Reading	6.2	8.3
Vocabulary	18.7	45.8

5. How much difficulty do you have in each of the skills listed?

	a lot (%)		a little (%)		none (%)	
	3rd year	4th year	3rd year	4th year	3rd year	4th year
Giving oral reports and short talks	18.7	12.5	43.7	75	37.6	12.5
Expressing your own opinions	18.7	8.3	43.7	70.8	37.6	20.9
Using a variety of grammatical structures when speaking	43.7	54.1	50.0	45.9	6.3	0
Using a variety of grammatical structures when writing	12.5	8.3	56.3	58.3	31.2	33.4
Using a wide range of vocabulary when speaking	31.2	25	62.6	70.8	6.2	4.2
Using a wide range of vocabulary when writing	0	4.1	75.0	62.5	25.0	33.4
Expressing what you want to say clearly	12.5	16.6	56.3	50.0	31.2	33.4
Spelling	12.5	0	37.5	41.1	50.0	58.9
Reading carefully to understand all the information in a text	0	4.1	43.7	41.1	56.3	54.8
Reading to get the main idea from a text	6.2	0	25.0	25.0	68.8	75.0
Understanding different accents	25.0	25.0	68.8	50.0	6.2	25.0
Understanding spoken description or narrative	18.7	0	56.2	70.8	25.1	29.2
Understanding informal language	18.7	20.8	68.8	41.6	12.5	37.6
Recognising individual words	6.2	12.5	75.0	62.5	18.8	25.0

6. How much would you like to improve the following:

	a lot (%)		a little (%)		none (%)	
	3rd year	4th year	3rd year	3rd year	4th year	3rd year
Listening	37.5	29.1	56.2	50.0	6.3	20.9
Speaking	75.0	66.0	25.0	29.1	0	4.9
Pronunciation	31.2	37.5	43.7	41.6	25.1	20.9
Reading	6.2	4.9	75.0	54.1	18.8	41.0
Writing	31.2	25.0	62.6	66.0	6.2	9.0
Vocabulary	68.8	54.0	31.2	41.1	0	4.9

7. What topics in your opinion should be included in the programme of teaching English to medical students?

• Medical breakthroughs and discoveries, • New treatment approaches, • Reading medical literature, • Writing abstracts, medical publications, • Various diseases and conditions, • Terminology for health professionals • Communication with patients, • Taking a patient history, • Revision of grammar, • Learning General English						

8. How much do you like the following learning styles

	a lot (%)		a little (%)		none (%)	
	3rd year	4th year	3rd year	3rd year	4th year	3rd year
Working with other students in pairs and small groups.	62.6	54.1	31.2	37.5	6.2	8.4
Working alone in class.	12.5	37.5	68.8	33.4	18.7	29.1
Teaching only by the teacher & no activities by the students.	0	12.6	43.7	29.1	56.3	58.3
When the teacher is strict and controls the lesson.	31.2	12.6	31.2	37.5	37.6	49.9
When the teacher facilitates and encourages learning.	56.2	66.0	37.5	29.1	6.3	4.9
When the class follows a textbook closely.	25.0	20.8	50.0	62.4	25.0	41.6
When the teacher gives tests and homework.	6.2	16.7	62.6	45.8	31.2	37.5
When the teacher makes explanations in Polish.	50.0	20.9	6.2	41.6	43.8	37.5
When the teacher makes explanations in English.	81.2	75.0	18.8	16.7	0	8.3
When the teacher corrects all my mistakes immediately.	56.2	41.6	31.2	33.3	12.6	25.1
When the teacher corrects students' mistakes anonymously.	18.7	12.5	31.2	37.5	50.1	50.0
When I correct my mistakes	43.7	37.5	37.5	50.0	18.8	12.5
Learning with the use of tapes/CDs/ Video films in the classroom.	62.6	79.1	31.2	16.6	6.2	4.3
Learning English grammar and the rules of correct English.	43.8	29.1	56.2	50.0	0	20.9
When the teacher moves around the class and helps individual students.	56.2	29.1	25.0	45.8	18.8	25.1
When we have translation exercises.	62.6	29.1	31.2	41.6	6.2	29.3
When I can choose other students to work with.	62.6	37.4	37.4	50.0	0	12.6
When I see the text rather than just listen to it.	25.0	41.6	56.2	37.5	18.8	20.9
Discovering answers by myself rather than just giving me the answers by the teacher.	56.2	41.6	37.5	45.8	6.3	12.6

When there is a friendly atmosphere in class.	100	95.8	0	4.2	0	0
When I can choose what I would like to learn.	62.6	66.0	31.2	34	6.2	0
When we (students) help each other in correcting our written work (or tests).	31.2	37.5	37.6	37.5	31.2	25.0
Having homework, which makes me read English articles or search on the Internet.	31.2	25.1	56.2	33.3	12.6	41.6
Having fun while learning.	81.2	83.4	12.5	16.6	6.3	0

References

Brindley, G.P. (1989). The role of needs analysis in adult ESL program design. In: John-son, R.K. (Ed.), *The second language curriculum.* Cambridge: Cambridge Univer-sity Press, pp. 63–78.

Busch, M., Elsea, M., Gruba, P., Johnson, F. (1992). A study of the needs, preferences, and attitudes concerning the learning and teaching English proficiency as expressed by students and teachers at Kanda University. *The Journal of Kanda University of International Studies*, Vol. 6, pp. 174–235.

Donesch-Jeżo, E. (2011). A study of the approach to give university students more auton-omy in their ESP courses. *US-China Foreign Language*, Vol. 9, No. 5, pp. 292–306.

Dudley-Evans, T., St John, M.J. (1998). *Developments in English for specific purposes*. Cambridge: Cambridge University Press.

Hutchinson, T., Waters, A. (1987). *English for specific purposes*. Cambridge: Cambridge University Press, pp. 53–56.

McDonough J. (1984). *ESP in perspective: A practical guide*. London and Glasgow: Col-lins Educational.

Munby, J. (1978). *A communicative syllabus design*. Cambridge: Cambridge University Press.

Robinson, P. (1991). *ESP Today: A practitioner's guide*. Hemel Hempstead: Prentice Hall.

Serafini, E.J., Lake, J.B., Long, M.H. (2015). Needs analysis for specialized learner popu-lations: Essential methodological improvements. *English for Specific Purposes*, Vol. 40, pp. 11–26.

West, R. (1997). Needs analysis: State of the art. In: Howard, R., Brown, G. (Eds.), *Teach-er education for languages for specific purposes*. Clevedon: Multilingual Matters.

Widdowson, H.G. (1983). *Learning purpose and language use.* New York: Oxford Uni-versity Press.