Reticence is not a Virtue in Aviation: Improving English Speaking Proficiency of Future Aviation Specialists

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Abstract: English language proficiency is a vital requirement for air-to-ground communication for aviation specialists. A special attention should be paid to developing speaking skills of future pilots, air traffic controllers and engineers. Our research has shown that future aviation specialists come across certain challenges in the process of communication in English: insufficient aviation knowledge to give an opinion, low motivation to speak, poor grammatical skills and insufficient knowledge of vocabulary items, uneven participation in discussions, and fear of making mistakes. To overcome these challenges some recommendations were formulated for teachers to follow. The problem-solving activities were chosen and designed to enhance students' speaking skills. They include value-clarification tasks, discussions, role-plays, information-gap activities, describing pictures, and discussing videos. This research aims to define the impact of applying these problem-solving activities on developing students' speaking skills. 120 second year students in aviation specialties took part in this experiment. They were divided into a control and an experimental group of equal numbers. In both groups, the teachers taught the same Aviation English content which corresponded to the syllabus. In addition, in the experimental group the teacher implemented the problem-solving activities, which contributed significantly to the development of future aviation specialists' speaking skills.

Keywords: *developing speaking skills; future aviation specialists; problem-solving tasks; teaching English for Specific Purposes; Aviation English.*

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1. Introduction

The aviation industry relies on a system where communication links all the elements to promote cooperation and provide safety (dos Santos et al., 2014). Achieving a high level of English language proficiency is a crucial part of future aviation specialists' training due to the fact that air-to-ground communication in international airways is conducted in English. To deliver routine messages pilots, air traffic controllers and ground engineers use radiotelephony phraseology to provide concise, clear and unambiguous language (ICAO, 2010). However, in emergency and non-standard situations 'plain English' is used as it is not possible to create a set of standard phrases to cover all events. The term 'plain language' means 'the spontaneous, creative and non-coded use of a given natural language' (ICAO, 2010, p. X). Lack of plain English proficiency not only hinders solving problems, but as a result can delete people's lives. Air crash statistics show that more than 800 people died in just three major accidents where a contributing factor was miscommunication.

The primary focus of language training for aviation specialists is to develop their listening and speaking skills as speech is the only tool available to exchange information between pilots and air traffic controllers. Due to the significance of the English language in aviation, ICAO developed the Holistic Descriptors & Language Proficiency Rating Scale, which states that achieving Operational Level 4 is compulsory for pilots and air traffic controllers. This level is evaluated according to the following criteria: pronunciation, structure, vocabulary, fluency, comprehension, interaction. The candidates are expected to be able to speak fluently at an appropriate tempo on general and aviation-related topics (ICAO, 2010). At the same time future air traffic controllers and pilots during their professional activity perform a wide range of communicative functions: confirm, negotiate, clarify, take turn to maintain or initiate interaction, express agreement or disagreement, appreciation, opinions, etc. (Petrashchuk, 2012, p. 162).

In Ukraine, students who enter higher educational institutions must pass the independent state English test, which is aimed at checking skills in reading, use of the language, listening and writing. Speaking is not included in this exam, so it is difficult to assess the English-speaking skill level of school graduates. However, experience shows that holders of school-leaving certificate have different levels of English-speaking skills ranging from beginner to intermediate. In universities they begin to study English for Specific Purposes with the emphasis on the specialty chosen. Sandal,

Detsiuk & Kholiavko (2020) state that due to the reduction of classroom hours for humanities in technical specialties in Ukraine, learning a foreign language focuses on vocational-oriented terminology, but not forming English communicative competence. The reality in Ukrainian aviation universities also demonstrates the tendency to concentrate on reading and translating texts employing aviation terminology, parts of manuals and aviation documents. As a result of these factors, students know specific vocabulary items, but quite often they have difficulty expressing their point of view, asking questions, paraphrasing, evaluating the information and interacting with a partner. Taking into account the above, new approaches should be introduced to focus more on the development of speaking skills in aviation education institutions.

Teaching speaking has been a focus of research for many scholars: Baker & Westrup (2003), Folse (2006), Luoma (2004), Nunan (1991), Shumin (1997), etc. The communicative approach in Aviation English was the subject of research of Mell (2004), Mitsutomi & O'Brien (2004), Paramasivam (2013), etc. In their works they highlight the necessity to develop speaking skills of future aviation specialists in order to meet ICAO requirements. The ICAO document "Guidelines for Aviation English Training Programmes" (ICAO, 2009a) provides the principals for designing Aviation English curricula where the communicative approach is the main focus. In this paper we present ways how to enhance English speaking skills through problem-based activities that can be integrated into the educational process of future aviation specialists.

2. Literature Review

Since the introduction of the communicative approach into learning languages, the main objective of ESL teaching has been to communicate effectively. Folse (2006) states that for most people knowing the language means the ability to communicate effectively as speech is one of the most effective ways of human communication. Nunan (2003) emphasizes that success in language learning is evaluated by the ability of speakers to conduct the conversation in the target language. Grammatical competence is not enough for learning a language. As Shumin (1997) points out, learning how to speak English presupposes not only the knowledge of grammar, you should be able to communicate at ease outside the classroom.

Communicative language teaching presupposes interaction with the instructor and the incorporation of personal experiences into the learning

environment. Luoma (2004) is convinced that speaking is considered to be a social activity which helps to disclose a person's character, beliefs and ideas. In other words, through speaking activities a person can express himself or herself. Baker & Westrup (2003) give importance to speaking skills by stating that a classroom can be viewed as a place where students practice the language feeling support but do not just focus on learning grammatical rules. The success in learning the language can be measured by the students' feelings in the process of speaking the target language.

Speaking can be defined as "the process of building and sharing meaning through the use of verbal and non-verbal symbols, in a variety contexts" (Chaney & Burk, 1998, p. 13). According to Nunan (2003), teaching speaking includes the following processes: producing the English speech sounds and patterns, being aware of word and sentence stress and intonation patterns, choosing appropriate vocabulary units and sentences according to the situation and the topic of the conversation, organizing thoughts and ideas into the logical order, using the language to express your point of view and communicating in the natural way, i.e. fluently. Thornbury (2007) states that spoken interaction is different from writing activity, as speakers and listeners must produce and process spoken interactions. There are time limits and this means that they are to process the information quickly without any chances to go back and change something. Speakers need to understand the relations with other people and adjust their utterances taking into account this fact.

A central issue in ESL teaching is how to teach speaking skills effectively. Alonso (2014) points out that such activities as storytelling, simulations, role plays, discussions, debates are communicative and interactive, providing learners with opportunities to practice grammar and vocabulary structures. Such activities concentrate on fluency and the teacher facilitates the process. Students also benefit from such activities as they practice the language in real life situations. The Ukrainian researcher Holubochka (2009) states that discussion as practice of communication skills foresees the development of skills of thinking logically, formulating the thoughts, listening carefully and expressing ideas according to the topic of conversation. The participation in the discussion of professionally related topics is supposed to help the learners to express their point of view, presenting arguments and factual information, agree or disagree, make suggestions and arrive at certain conclusions. Ischenko & Libih (2009) point out the necessary conditions for effective discussion: the right choice of the

topic of discussion; equal participation of all the members of the group in the communication activity; a high level of motivation of all the participants if they are involved in the discussion of professionally related topics.

Feschuk (2016) grounded the basis for professionally oriented foreign language training in the sphere of engineering, where the primary importance is given to solving communicative tasks in professional activities. One of the principals of how to develop foreign communicative competency is problem-based education.

There are a number of findings in the Aviation English domain which prove the necessity of using problem-solving methods for developing the English proficiency of future aviation specialists. Bystrova et al. (2019) state that problem-based ESP methods allow the application of professional knowledge and the creation of professional situations in the classroom. Moskalenko et al. (2019) note that designing Aviation English curricula should be based on interactive methods with the emphasis on solving communicative tasks: debates, role plays, interactive activities, etc. They are not only beneficial for mastering English, but also increase students' motivation in learning a foreign language. Barbieri (2015) states the significance of task based learning which enhances both communication and thinking in English. This type of learning is also based on solving various professional problems; as an example the researcher provides the situations of designing aircraft and filling in flight plans.

3. Methodology

3.1. Design of the study

Before designing and choosing speaking activities, we have analyzed the challenges and barriers that future aviation specialists (pilots, air traffic controllers, and engineers) have during communication. We have interviewed the teachers of the Flight Academy of the National Aviation University (Kropyvnytskyi, Ukraine) and distinguished the main barriers to develop speaking skills with recommendations for how to overcome them.

The first challenge is that in many situations involving general and aviation content, students have nothing to say. Our observations and the results of the interviews show that this happens because the students do not know much about the topic being discussed. For this reason, a teacher should be very careful while choosing the topics for conversation. S/he must take into account the material learnt in other subjects. Studying

students' curricula will help a teacher to succeed in choosing the right topic for discussion.

The second challenge is that motivation for the majority of the Ukrainian students is low. This is the case because of the low level of student employment after graduation. However, a teacher can take certain steps to increase extrinsic motivation. Telling the stories of successful graduates and talking about the requirements of leading aviation companies can make students more motivated and involved in the process of learning English.

One more barrier to effective communication is poor grammatical skills and an insufficient knowledge of vocabulary items. To avoid such problems, before the activity, the teacher can review some grammatical structures, for example Present Simple and Present Continuous for describing pictures on aviation topics. The same procedure can be done with new vocabulary items. A teacher can present them with definitions and give students the chances for practice. In such a way, the students will be well prepared for the activities that follow.

During speaking activities, it often happens that some students are more active than others. To balance participation a teacher can introduce pair or group work. The work of all students should be evaluated at the end of the class. Special attention should be paid to less active students. They should be asked more questions and given more tasks.

The next barrier is that students are afraid of making mistakes. There is a term "speaking anxiety" which is used to describe this state. E. K. Horwitz, M.B. Horwitz & Cope (1986) state that "since speaking in the target language seems to be the most threatening aspect of foreign language learning, the current emphasis on the development of communicative competence poses particularly great difficulties for the anxious student" (p. 132). They compare the state of a person who tries to use the second language with a child, meaning that the person is not confident, feels fear and unsure what next step to take. To avoid this, a teacher should not concentrate on student errors. S/he should only focus on crucial errors.

All these strategies of how to deal with these challenges lay the foundation for developing speaking skills for future aviation specialists and recommendations for teachers who conduct the classes.

For developing speaking activities, we have also used a value clarification approach, which is based on discussions where students assess the values, make their own judgements, reveal their feelings and prove their

point of view (Casteel & Stahl, 1975). According to Meiswinkel (1981) in the process of speaking the clarification of human values is the natural process. Fariyatul & Bandonio (2017) state that the character education which focuses on a group of values is important and cannot be separated from the students. Wening (2012) points out that an important link between education and character building is the system of values. In the future this factor will help the learners to face the challenges. When students are involved in problem-solving tasks, they are to make the decisions based on their experience, feelings and understanding of the situation. In values clarification activities there are no right or wrong choices; each individual decides for himself what choice to make. Thus, taking decisions and discussing judgements students are actively involved and motivated to communicate.

We recommend using such activities as “Island Problem”, “Who Gets the Heart?”, “Starting a New Civilization”, “Time Capsule”, etc. for developing speaking skills of future aviation specialists. The procedure for each activity will be similar. First, students are introduced with the situation, for example, for “Island Problem” it will be: *“In the very near future, you are going to spend three years on an uninhabited tropical island. During this time you will have NO contact with any other people. The climate on this tropical island is moderate and it never gets cold. Also, there is moderate rainfall throughout the year. The island has lush vegetation and diverse animal life. You may bring 8-12 items with you. You cannot bring a member of the opposite sex or any means of transportation to get off the island. You may, however choose any other items that you think will best enable you to survive on this island for three years. Which 8-12 items would you chose? Why would you choose them? Remember – you may be able to make certain tools, etc. from the resources on the island”*. Next, the students work individually and list their 8-12 choices and provide a reason why they choose this item. After that, the students work in a small group of 3-4 students and discuss their choices. The group must agree on 8-12 items. Then the group will present the group choices to the other groups in the class. The teacher writes the choices on board. After all the choices are written, the teacher calls one group to give reasons for the same answer. If the answers are not the same, the students have to defend their choices. The whole class will debate the choices and try to reach agreement of a final list of 8- 12 items.

Discussions are the basic method that is used in developing speaking skills. They can be aimed at finding out student opinions on the given issue, finding a solution to a problem, etc. The students can express their opinion

individually, e.g. whether they agree or disagree with a statement or they can work in groups of 3-5 people to exchange their opinions and come to a common solution to the problem. The teacher should facilitate the speaking process giving equal time for speaking to different group members. As an example of such an activity we applied the Pro Con'D model for discussion. The teacher asks questions, for example, *Should passenger aircraft use biofuel?* or *Should it be mandatory to lock the cockpit door?* The students are divided into teams of not more than 3 students. Their task is to answer the question using the following outline:

Pro — What are the advantages to this particular situation?

Con — What disadvantages are associated with this situation?

'D — What needs to be discussed further?

The teacher appoints a team leader for each team, whose job will be to ensure that the question has been put to Pro Con'D scrutiny before the "majority-rules" answer ("yes" or "no") is given.

It is of paramount importance for future aviation specialists, as this kind of activity fosters the development of critical thinking skills, encourages students to accept responsibility and make decisions quickly. From an ethical point of view, students learn to listen to other people's opinion, be tolerant to other ideas, and support and respect each other.

An example of another discussion conducted in the classroom is "Planning a New Curriculum for Ukrainian Flight Universities". First, the teacher introduces the situation: *'Many of you will be graduating the Flight Academy in a relatively short time. There were probably courses that you really enjoyed and some which you did not. In addition, there are probably courses that you wish you could have taken but that were not available. Your task is to write a new curriculum for Ukrainian Flight Universities'*. The teacher gives the structure and possible courses for this task, hands out the empty table for scheduling subjects. Students fill in the table in groups of not more than 4. The teacher monitors students' interaction. The students present their reasons. The teacher writes responses by group on board, so the whole class can see how each group voted. The students try to agree on one schedule.

Another powerful method for developing speaking skills is role-play. In role-plays, students get roles and are put into situations which can occur outside the classroom. This activity is especially suitable for aviation specialists as we can practice different routine and emergency situations between a pilot and an air traffic controller. The students can enjoy their roles, imagining that they are real. To succeed in this activity, there are

certain steps to follow. The teacher must prepare carefully: review necessary grammatical structures and vocabulary items, give the students cards with their roles and instructions, and provide some time for preparation. While the students are working, the teacher carefully monitors the process. The teacher shouldn't be disappointed if students make some grammar mistakes or use their mother tongue. Some examples of such activities are hiring an aviation specialist (a recruitment manager, a pilot, an engineer, an air traffic controller), solving a medical emergency on board (a pilot, flight attendant, a passenger, an air traffic controller), booking a tour (a customer and a travel agent), etc.

For improving speaking skills, we recommend information gap activities where students need to get the missing information and complete the worksheet. The situation is similar to real life situations when in the process of communication, you need to find out the information about the person you are talking to. On the one hand, this activity requires from students more than just practicing certain grammatical structures and vocabulary items. On the other hand, such activities involve practicing real life communication. What is more, a teacher should be aware of the language to be used in this activity and provide students with the opportunity to practice necessary structures, before they begin the activity.

Describing pictures is the next speaking activity. In spite of the fact that this activity is an easy one, it is extremely productive. Students get pictures that illustrate different aviation situations. A teacher can introduce basic vocabulary to be used in the process of description. This activity is included in the exam for ICAO 4 Level. There are a few benefits of using this activity. Firstly, the students practice vocabulary items from different aviation topics and familiar grammatical structures. Secondly, they improve their speaking skills. The level of this activity increases depending on the level of students. The beginner students describe simple pictures requiring no speculation. Advanced students describe the pictures depicting complex aviation phenomena. Vocabulary units and grammar structures are more profound, application of critical thinking skills is highly recommended. One of the complex descriptions is the technique Six Steps to Effective Thinking and Problem Solving ("IDEALS")

I - Identify the Problem: What is the problem in the picture?

D - Define the Context: What is the background information? (airline, a type of aircraft, location, weather conditions)

E - Enumerate the Choices: What could be the causes that led to this event?

A - Analyze Options: What is the most probable cause?

L- List Reasons Explicitly: Why did this happen?

S - Self-Correct: Look at it again ... What did we miss?

For this activity students work in pairs. One person is the problem-solver and the other is the peer coach. The problem-solver describes the picture by responding to questions from the peer coach. Students change their roles and describe another picture.

Discussing videos about aviation non-routine and emergency situations is a typical activity for training future aviation specialists. Students must be aware of different possible professional situations, such as crosswind, birdstrike, engine failure, landing gear damage, etc. A one to two minute silent video, demonstrating one of these episodes, is played and after that the students are asked to describe the problem, possible reasons, consequences, and further actions taken. The teacher asks additional questions to lead a discussion.

All the activities described above are based on applying problem-solving skills, which are vitally important for future pilots, air traffic controllers and engineers. Sometimes you have a few seconds to take the right decision. By giving such tasks to students, we prepare them for real life situations hoping that they will be able to deal with both routine and non-routine situations.

3.2. Participants

The participants in this research were 120 second year students of aviation specialty students (pilots, air traffic controllers, engineers) from the Flight Academy of the National Aviation University (Kropyvnytskyi, Ukraine). They entered the Flight Academy with different levels of English proficiency. However, all of the students had passed the External Independent Testing in English. This exam is obligatory for those who finish secondary school in Ukraine and intend to enter institutions of higher education. The students were between 18 to 19 years old and were assigned to control or experimental groups in such a way that the two groups were equal in terms of language proficiency. The students were divided into the experimental group (60 students) and control group (60 students).

3.3. Instrumentation and Data collection

To evaluate students' speaking skills, we used a speaking test which was delivered in the form of an interview. The form of direct testing has a

number of advantages. One benefit of direct testing is that the test activities can be made more natural or more communicative, as the test-takers interact with the interlocutor. Another benefit is that there is an infinite supply of test prompts available because each test is a unique interaction between the interlocutor and the test-taker. For example, if a test-taker mentions during a test that his father was an air traffic controller, the interlocutor could ask the test-taker questions related to that information — questions which the interlocutor may not ask any other test-taker. In a direct test, there is also less likelihood of a test-taker responding with rehearsed speech samples in an effort to convince an examiner of a higher level of proficiency than actually attained (ICAO, 2009b).

This research exploited oral interviews both prior to the beginning of Aviation English course and also right at the end of the course. The interviews were recorded for further detailed analysis. Each taped interview was rated by two ICAO raters in order to ensure the inter-rater reliability of the assessments. The first interviews were carried out prior to the beginning of the Aviation English course to be compared with those conducted at the end of the course. The course of Aviation English lasted for 2 semesters. The aim was to determine if focusing on developing speaking skills with the experimental group resulted in increased language proficiency as compared to the control group where the content of the course was taught without the focus on developing speaking skills.

The speakers were evaluated in accordance with ICAO Language Proficiency Rating Scale (ICAO, 2010). In accordance with ICAO Language Proficiency Rating Scale 6 levels of language proficiency can be distinguished: Pre-elementary (1), Elementary (2), Pre-operational (3), Operational (4), Extended (5), and Expert (6). Each level is assessed in accordance with the following criteria: Pronunciation, Structure, Vocabulary, Fluency, Comprehension, Interaction. In the framework of our research we are going to focus on Elementary (2), Pre-operational (3) and Operational Level (4) due to the fact that the second year student pilots neither have as low level as pre-elementary neither as high as extended (5) or expert (6).

3.4. Procedure

120 first and second year students of aviation specialty students (pilots, air traffic controllers, engineers) of the Flight Academy of the National Aviation University (Kropyvnytskyi) were chosen and assigned to control (CG) and experimental (EG) groups in such a way that these two

groups were equal in terms of language proficiency. According to the curriculum, the second year students have 2 classes of Aviation English and 1 class of General English. We integrated 32 speaking activities into the course of General English for the experimental group. In both groups the same content of Aviation and General English which fully corresponded to the syllabus was taught.

During the first class, the teacher of EG explained to the students that one class per week will be devoted to developing speaking skills through problem-solving tasks. The focus will be made on fluency, comprehension and interaction. The teacher presented one activity as an example to show how it works in real life. The teacher also pointed out that there would be different kinds of interaction, i.e. pair work and group work. An oral interview to measure speaking skills was conducted at the beginning of the course and at the end to see if students had made any progress in speaking through problem-solving activities.

4. Results and Discussion

After conducting the interview, the students were distributed into three levels: intermediate, pre-intermediate, elementary (Table 1).

Table 1. Distribution of levels of speaking skills (SS) in control and experimental groups pre-test

Study groups	N	Students (Percentage,%)			
		Elementary	Pre-intermediate	Intermediate	
Pre-test Scores	CG	60	23 (38%)	24 (40%)	13 (22%)
	EG	60	22 (36%)	25 (42%)	13 (22%)

We used an independent samples t-test to examine if the level of speaking skills was the same in the experimental and control groups (table 2). As shown in Table 2, there is no significant difference in the mean scores on the pre-test of speaking skills (SS) (M_{CG} : 3.83, SD_{CG} : .7628, M_{EG} : 3.85, SD_{EG} : .7552) of both groups. It can be concluded that levels of English speaking was the same at the beginning of the study.

Table 2. Results of experimental and control groups in speaking skills (SS) pre-test

Study groups	N	Mean	St. Deviation	STD. Error Mean
Pre-test CG	60	3.83	.7628	.09848
Scores in SS EG	60	3.85	.7552	.0975

To test the significance of the difference, a paired t-test for independent means was performed for the levels of speaking skills pre-tests. The following results were obtained: the t-value of speaking skills – -0.12027, the p-value of speaking skills – .904476. Therefore, it can be concluded that there was no significant difference in terms of the groups' performance pre-test at $p < .05$.

Paired-samples t-test results (Table 3) suggested that in the post-test the performance of the experimental group (MEG: 4.3) in speaking skills was higher than the performance of the control group (MCG: 4.07).

Table 3. Results of experimental and control groups in speaking skills (SS) post-test

Study groups	N	Mean	St. Deviation	STD. Error Mean
Post-test CG	60	4.07	.7334	.09468
Scores EG	60	4.3	.6189	.0799

To assess whether there were any significant changes between the pre-test and post-test scores of each group, the pair samples t-test was used. Based on the obtained results (Table 2, 3) we calculated the difference between the means of the experimental group before and after the experiment and proved that the results in both groups are statistically significant: EG – $t = 6.947858$, $p = .00001$, $p < .05$; CG – $t = 4.237514$, $p = .00008$, $p < .05$. The findings show that both groups, the experimental and

the control one, demonstrated improved speaking skills, however in the experimental group the students' performance was higher (Table 4).

Table 4. Distribution of levels of speaking skills (SS) in control and experimental groups post-test

Study groups	N	Students (Percentage,%)		
		Elementary	Pre-intermediate	Intermediate
Post-test Scores	CG 60	14 (23%)	28 (47%)	18 (30%)
	EG 60	5 (8%)	32 (54%)	23 (38%)

The results which we received in this part are similar to the findings of other research papers (Nunan, 2003; Shumin, 1997; Luoma, 2004; Baker & Westrup, 2003) which have shown that we can create favorable conditions in the classroom for practicing speaking skills. The problem-solving tasks chosen for the experiment fostered the communication between students. In this aspect we agree with Alonso (2014) who pointed out that such activities as storytelling, simulations, role plays, discussions, debates are communicative and interactive. They provide learners with possibilities to practice grammar and vocabulary structures.

Despite some problems, pair work, group work, role plays, discussions and other problem-solving activities motivate shy students to share their opinions not only with their teacher, but also with their groupmates. Applying various techniques in the classroom creates challenges for students and diversifies their learning styles (Alharbi, 2015, p. 109).

Thus, applying problem-solving activities the outperformance of the experimental group in comparison with the control group can be explained by the important role of problem-solving education in the learning process. Such activities encourage students to speak English, be active and make their own contributions in group projects.

5. Conclusion

The research conducted shows that teaching English in higher aviation educational establishments has its unique challenges. The focus is made on learning technical vocabulary units, reading and translating texts on aviation topics. The demands at present make us rethink the most effective

approaches to teaching English. Traditional methods should be reexamined and now approaches should be applied when appropriate.

In the process of working with students in an aviation university we notice that certain problems arise in the process of teaching English. Firstly, students have nothing to say. Secondly, the level of motivation is low. Thirdly, students have poor grammatical skills and insufficient knowledge of vocabulary. Besides this, very often participation is uneven, in other words, some students are more active than the others. Finally, the learners are afraid of making mistakes.

To overcome the challenges indicated above, we have implemented problem-solving tasks, such as discussions, role-plays, information gap tasks, describing pictures and discussing videos into the course of General English for aviation specialists. It is necessary to point out that all these activities are based on developing problem-solving skills which are vitally important for the specialists in the sphere of aviation. Special attention in our research was given to a value-clarification approach. Applying this, students take decisions in the given situation based on their own system of values.

The results of the research show that in terms of speaking skills the experimental group outperformed the control group. This outcome proved the hypothesis that problem-solving tasks integrated into the course of General English impacted positively on the level of students' speaking skills. They encourage active participation and the expression of their opinion on different topics. The students in the control group also made some progress in mastering their speaking skills but not as significantly as the students in the experimental group. As a result, we may conclude that integrating problem-solving tasks into an educational process has a significant effect on developing future aviation specialists' speaking skills.

Our research reveals that applying problem-solving tasks helps students to overcome their fears to speaking English and making mistakes. They have become more confident and eager to make their contributions into group work in class. The level of motivation has also increased. Specially-designed tasks are an excellent means towards motivating students to think and express their point of view. A psychologically positive environment stimulated learning as well.

All this convinces us as to the necessity of including problem-solving tasks in the syllabus of General English designed for training future aviation specialists (pilots, air traffic controllers, engineers). We recommend

including similar tasks into the syllabuses designed for students of other technical specialties.

Further possible research will be conducted on the prospects for implementing problem-solving tasks on ICT platforms for learning English.

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