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DEVELOPING UNIVERSITY STUDENTS' SOFT SKILLS VIA PROJECT ACTIVITIES

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Abstract. Developing soft skills is essential for future professionals to effectively navigate both personal and professional challenges and interactions. However, due to the abundance of soft skills, designing a unique development model can be challenging. A survey of 83 second-year IT students at South Ural State University revealed that key soft skills for them include teamwork, time-management, responsibility, and reflexivity. The survey also highlighted project activities as a particularly effective method for developing soft skills. This article aims to create a model that integrates soft skills development through project activities specifically tailored for ESL classes. The authors developed a model using systematic, complex, and personality-oriented approaches. The methodological basis and content of the model were defined. The model has two components (operational and determinant) and three units (motivational, modelling, and evaluation-corrective). The authors conclude that implementing a student-centered approach in ESL classes provides students with a tangible opportunity to enhance their soft skills.

Keywords: model, soft skills, English for Specific Purposes (ESL), project activities

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РАЗВИТИЕ «МЯГКИХ НАВЫКОВ» СТУДЕНТОВ УНИВЕРСИТЕТА ЧЕРЕЗ ВОВЛЕЧЕНИЕ ИХ В ПРОЕКТНУЮ ДЕЯТЕЛЬНОСТЬ

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Аннотация. Развитие «мягких» навыков важно для будущих специалистов, так как они помогают решать разные жизненные и профессиональные задачи и успешно общаться с другими людьми и окружающим миром. Однако их огромное количество значительно усложняет процесс создания уникальной модели для их развития. Опрос, в котором приняли участие 83 студента второго курса компьютерных специальностей, выявил, что самыми необходимыми для формирования «мягких» навыков являются работа в команде, управление временем, ответственность и рефлексивность, развитие которых лучше всего осуществлять посредством проектной деятельности на занятиях по иностранному языку. Целью исследования является построение модели развития «мягких» навыков через вовлечение студентов в проектную деятельность, для чего была определена методологическая база

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и содержание модели. Модель основывается на системном, комплексном и личностно-ориентированном подходах, включает в себя два компонента (оперативный и определяющий) и три блока (мотивационный, моделирующий и оценочно-корректирующий).

Ключевые слова: модель, «мягкие» навыки, английский язык для специальных целей, проектная деятельность

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Introduction

Developing soft skills is becoming more and more important nowadays, they can be even an indicator of success in life and future career. What can be inferred from this is that soft skills and people's personal and professional achievement corelate strongly. Studies like Levy et al. [18], and Job Outlook 2017 [14] show a consistent increase in demands of soft skills from the labor market. According to Wats and Wats [26], it is because of the new technologies adopted by businesses resulting in creating a 'knowledge economy'. The 21st century occupational structure requires soft skills alongside hard skills [24]. That is why, it is important to integrate developing soft skills in the higher education institutions [8].

Despite the current need for soft skills development, many studies, for instance [3, 15, 20, 24, 27], have demonstrated the urgency to paying attention to the gap between graduates' skills and the mobile and globalized job requirements. In addressing this concern, the literature shows models that have been designed for soft skills development, such as [1, 4, 7]. Ngang [21] lists three widely accepted models for developing soft skills. They are:

1) The Stand-alone Model: elective or additional courses that students can apply to. The disadvantages of this model from the students' point of view are the increase in credits, human resources and time spent.

2) The Embedded Model: it integrates soft skills are integrated across the curriculum. Students learn soft skills through formal teaching activities with specific strategies, linking learning outcomes to instructional plans. Teaching activities include questioning, brainstorming, teamwork, presentation, simulation, projects, role-play, etc. It requires lecturer expertise and is student-centered, involving active participation from both teachers and students.

3) Combination of both above-mentioned models.

Chepkwony et al. [5] argue that the Embedded Model is the most effective among the three because it is more student-centered and provides students with practical experience.

However, the OECD [22] suggests that a universally agreed-upon standard and procedure does not exist for developing soft skills. According to the literature, there are two primary reasons for this. First, Devedzic et al. [9] and Doyle [10] argue that the vast number of academic disciplines makes it nearly impossible to create a universal model that can be used across all fields. Another factor is the extensive list of soft skills, which makes it highly unlikely to have a single model for developing all these diverse soft skills. In order to develop an effective model for developing soft skills, it is best integrating them with hard ones and focus on a few skills at a time.

Therefore, the aim of this study is to design a model for developing university students' soft skills in the educational environment while teaching English by combining classroom and online activities.

The objectives of this research are:

1) to define the soft skills which we are going to focus on;

2) to choose project activities through which we are going to develop the defined soft skills;

3) to determine the methodological basis and the content of the model.

The chosen skills that the model focuses on are teamwork, time-management, responsibility and reflexivity. The model employs project activities that are conducted individually, in pairs or groups because such project activities provide an excellent opportunity for students to rely on more and improve the selected soft skills.

Materials and Methods

In our study we used such methods as the analysis of scientific literature, questionnaire to obtain data (a survey), methods of mathematical processing the data obtained, and pedagogical modelling.

Surveying

To achieve the first and second objectives of our research we conducted a survey among 83 second-year IT students of South Ural State University at the beginning of the semester in September 2023. The students' level of English proficiency was B1. The purpose of the survey was to determine which skills are of significance in students' major and future career as future programmers as well as the project activities for developing those skills.

Based on the survey results and the literature review method, a list of key soft skills was prepared for students majoring in computer programming namely time-management, reflexivity, responsibility and team working skills.

The survey originally consisted of eight questions. However, only two questions are related to scope of this article and they are as follows:

1. What activities do you think might help you develop the necessary soft skills during English language classes?
2. What soft skills are important in your future workplace?

Modelling

For achieving the third objective, we applied the method of pedagogical modelling which serves as a way of creating new or refined scientific knowledge. Pedagogical modelling is linked to the application of learning theory and is based on factors that have been empirically shown to influence outcomes [19]. It is about what to teach and how to teach it considering the learner and the end-goal. According to Beal and Lee [2], the goal of a pedagogical model is to balance the degree of guidance and challenge throughout a learning event in order to affect performance and interaction while preserving student involvement and motivation.

From this point of view, a pedagogical model is designed to act as a facilitator for Vygotsky's Zone of Proximal Development (ZPD) [12]. According to Kivunja [16], a model is a conceptual framework that provides a method of thinking about or comprehending the relationships that exist in a process. It postulates on the linkages involved, the principles that underpin those interactions, and the structural and cultural dynamics that are accountable for the model's causes and consequences.

To create educational models, several steps are involved: 1) choosing the theoretical and methodological principles that lay the groundwork for studying the pedagogical phenomenon, and 2) justifying the internal structure and substance of the pedagogical model under development, and 3) identification of its essential principles for application in the university's real educational process.

A pedagogical system can be characterized as a compilation of interconnected tools, techniques, and procedures that are essential for creating a structured and intentional pedagogical impact on the development of an individual's qualities [23]. A pedagogical system is a type of social system that is characterized by its specific goals related to education, development, and teaching methods. It involves elements such as control and feedback. The existence of a pedagogical system is justified by the societal goal of shaping individuals. Therefore, if this goal changes, the system should also be adapted accordingly. All pedagogical systems share certain characteristics. They are constructed and designed, aimed at development, open to change, and grounded in social interactions. These systems are real and dynamic, consisting of such components as students, educational objectives, educational content, the process of teaching or learning, instructional tools, and organizational structures for training and education.

To determine the internal content of any pedagogical model, it is necessary to determine its methodological basis. In science, these are theoretical and methodological approaches. These approaches are mutually complementary and, in this research, they consist of the systematic approach, the complex approach and the personality-oriented approach.

The main research approach used to examine the factors that influence the management of the pedagogical system is a systematic approach. This approach helps to identify the unity and integration of all components and subsystems, along with their correlation to the mechanisms, techniques, instruments, and principles of educational management. When employing this approach, it becomes clear that the educational process is a holistic entity with interlinked structural components that conform to the fundamental principles of system organization and functioning. Implementing this approach enhances the orderliness, logicality, coherence, and ultimately the effectiveness of the system for developing soft skills.

It is impossible to study the essence and

the integrity of any pedagogical system without complex approach. This approach to studying the educational systems involves a systematic and detailed analysis of pedagogical activity results, identifying connections, determining the specific problems of society, developing of teaching technologies and content substantiation.

Personality-oriented approach to the pedagogical process means prioritizing forming the student as a personality, the full implementation of internal resources based on mutual assistance, collaboration, and collective creativity of the students and a teacher. This implies that when designing and implementing the pedagogical model, the focus is on the individual as the ultimate goal, subject, outcome, and primary measure of its success. This approach necessitates acknowledging the individual's distinctiveness, intellectual and moral autonomy, and entitlement to respect, thus aligning with the central principles of the humanistic paradigm [11].

Following the approaches mentioned, a model was designed with tailored project activities for developing the chosen soft skills. A major component of the model was to make sure the students were taught the curriculum material and develop the targeted soft skills simultaneously.

Results and discussion

We analyzed the results of the survey conducted among IT students. The first question of the survey required students to choose activities from a given list as useful activities for developing necessary soft skills. The table below (Table 1) shows the activities list in order of their importance.

The respondents were given the chance to choose as many activities as they think are helpful. Among the responses, "project work" topped the list, whether individually, in pairs or in groups. It was selected by 92% (76 students). The second on the list is "excursions to interesting places". This was chosen by 57% (47 students). "Reading texts connected to future profession" was picked by 34% (28 students). 27% (22 students) in the survey chose "watching videos related to their future professions" for developing their soft skills. "Doing vocabulary activities" was chosen by 19% (16 students) while activities related to "grammar work" were selected by 17% (14 students). Finally, 12% (10 students) chose "performing tasks from training courses" as a helpful activity develop soft skills in their EFL classes. The responses show and emphasize the importance of involving students in collaborative and communicative tasks in order to develop necessary soft skills. This is clearly reflected in the table above with project works being chosen by 92% of the respondents. This result agrees with those found in the literature such as Guerra-Báez [13] and Lagos [17] who both contend that activities that require students to interact and build relationships with others are the best type of activities to develop soft skills. Project works in pairs or groups precisely fall under that category.

The second question in the survey required students to list important soft skills for their future professions. The results are shown in the chart below (Fig. 1) ranked from the most frequently chosen to the least.

Among the 83 respondents, only 22% (18 respondents) responded as "I don't know", while the remaining majority 78% (65 respondents) listed various soft skills they consider necessary for their future career. In line with the results of this essay are Sejzi et al. [25] and Crawford et al. [6] who list the skills mentioned above among the most important skills for university students and their future careers. This paper's suggested model focuses on four of those important skills: team working, time-management, responsibility and reflexivity.

Table 1

The list of activities for developing soft skills

No	Activities	Percentage
1	Project work whether individually, in pairs or groups	92% (76 students)
2	Excursion to places related to future profession	57% (47 students)
3	Reading texts connected to future profession	34% (28 students)
4	Watching videos connected to future profession	27% (22 students)
5	Vocabulary work	19% (16 students)
6	Grammar work	17% (14 students)
7	Performing tasks from training courses	12% (10 students)

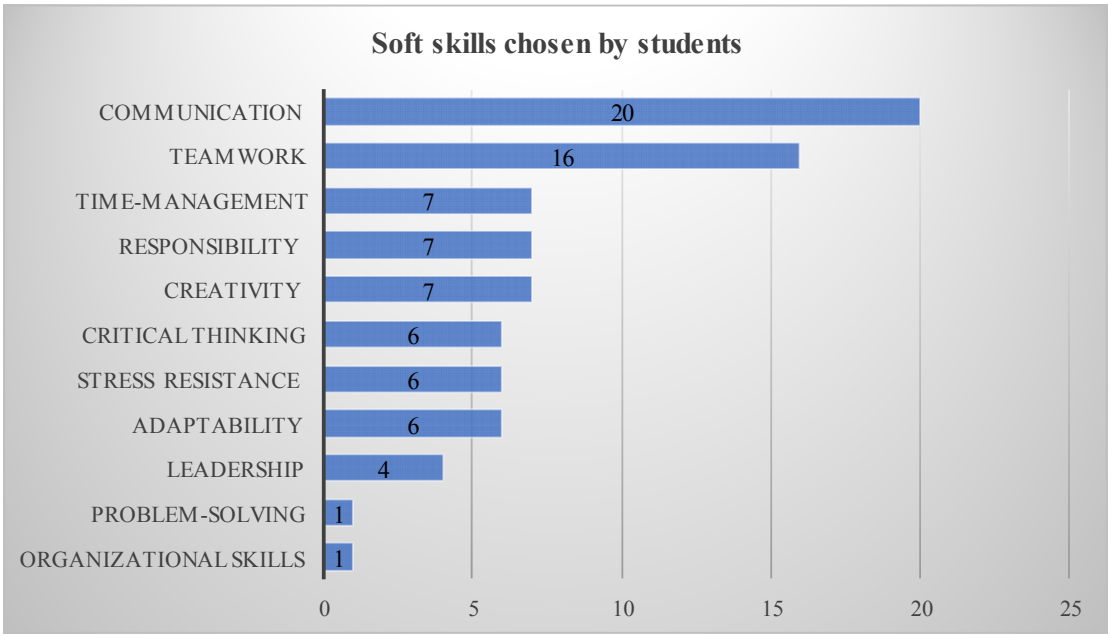

Fig. 1. The list of most important soft skills for IT specialists

Chepkwony et al. [5] agree that the best way to develop soft skills is to integrate them with hard skills throughout the teaching process within the classroom. Following this approach, a model was designed guided by the results of the two questions concerning important soft skills for the participants of the survey and the activities that facilitate the development of such skills. This is a vital part of the model designing process as the type of soft skills determines the most suitable project activities for its development. Considering all of those determinants, the following figure (Fig. 2) shows the designed model for developing university students' soft skills in the ESL classes.

The model is a general picture that represents the process through which students' soft skills are developed. It is necessary to explain the units that comprise the model. The fundamental aim of the model is to develop a set of soft skills, namely time-management, responsibility, teamwork, and reflexivity. As it can be seen, the model consists of two main components: operational and determinant. The aim of the operational component is developing students' English, while the determinant's aim is to develop students' soft skills. These two components go side by side. In other words, students' soft skills are being developed while learning and improving English language knowledge.

The motivational unit is connected with students' motivational aspect. It performs the function of motivating and stimulating students' educational cognitive activity for acquiring necessary knowledge and their desire for self-improvement to develop soft skills.

The modelling unit focuses on implementing the state educational standards in the field of foreign language learning. Various project activities are conducted in the implementation that ensures meeting the standards as well as developing soft skills.

The evaluation-corrective unit aims at carrying out assessment procedures to verify that necessary knowledge has been acquired and targeted soft skills have been developed in the process. This unit allows the teacher to reflect on how effective the process of developing soft skills is and make necessary adjustments if needed. The students also have an opportunity to see their results, progress and self-education. This unit is connected to the previous two in such a way that the teacher can return to either of them depending on any shortcomings identified. In this model, each unit is closed, relatively autonomous and implemented sequentially.

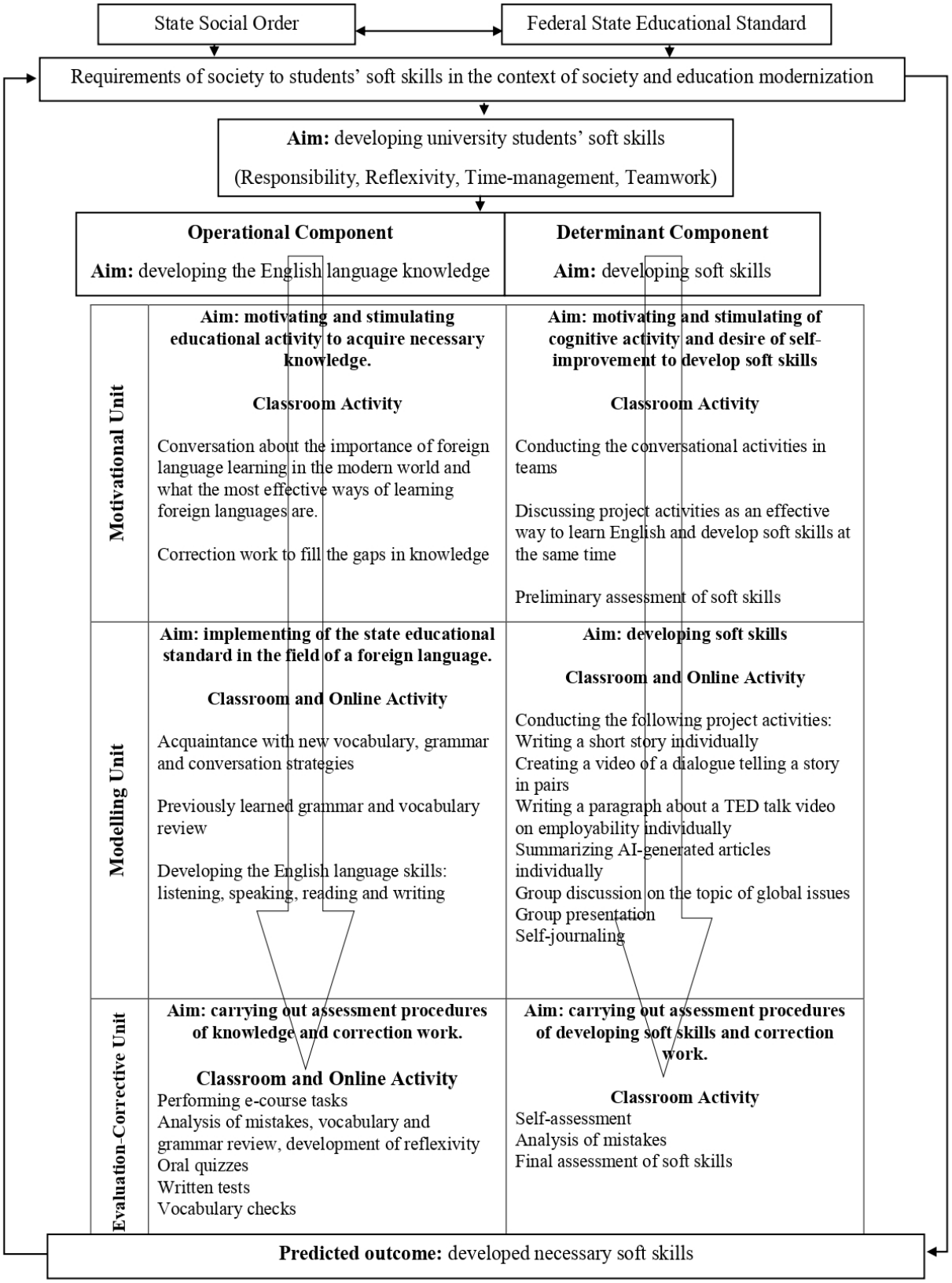

Fig. 2. Model of the developing university students' soft skills process in the ESL classes

Conclusion

To sum up, as a unique model for developing soft skills does not exist, it is crucial to determine what skills it is necessary to develop for different specialties. In light of this, this study aimed at determining what the most important soft skills are for IT specialists and what activities can be most helpful in developing those skills in ESL classes. With the results of the survey, a pedagogical model was designed that focuses on developing four important soft skills – teamwork, time-management, responsibility and reflexivity – through project activities that can be implemented inside or outside the class. The model consists of two components (operational and determinant) and three units (motivational, modelling and evaluation-corrective) and is based on the systematic, the complex and the personality-oriented approaches. This study's contribution can be seen in the fact that the model can be used in ESL classes for students of different majors and the activities can be substituted by others as long as the operational component of the model remains the same. Studying the results of the survey, an implication can be made that having students involved in communicative and collaborative tasks in ESL classes can facilitate the development of soft skills.

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Lazorak O.V. – scientific management; research concept; methodology development; follow-on revision of the text, final conclusions.

Dara Kamal Mohammed Amin – writing the draft; participation in the survey development.

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