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Pedagogical Strategies for the Development of Soft Skills of Schoolchildren in After Class Education

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Abstract

The study presents the set of pedagogical strategies for the soft skills development and the results of the model implementation of the profiled pedagogical class within the framework of after class education model as a part of the experiment of professional pedagogical education enhancement within the strategic mission of continuous teacher education in the Kaliningrad region. The curriculum for profiled classes, and the description of the implemented approaches, methods and techniques are proposed. Recommendations on how to integrate soft skills into the curriculum, how to develop them using the appropriate pedagogical strategies of orientation, interaction and support, and finally, how to evaluate them are given. Three main components in the development of soft skills among students of the pedagogical class are distinguished, being the blocks of the development of cognitive abilities, the development of activity abilities, and the development of personal abilities. The assessment of the results of the project is conducted after the implementation of the two-year programme. The results are obtained with a set of the diagnostic tools, being a sociability assessment method, expert assessment of the cohesion of the study group, a technique for diagnosing an interactive personality orientation, a method for diagnosing motivational orientation in interpersonal communications, an adapted questionnaire on the styles of thinking, and a technique for diagnosing personal creativity. The results make it possible to conclude that the proposed model can be successfully replicated and implemented in the context of pedagogically oriented education for schoolchildren.

Keywords: soft skills, profile pedagogical class, continuing teacher education.

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Introduction

Nowadays the demand for teachers who are able to qualitatively and comprehensively develop the personality of each child is more than ever visible. The achievement of the level of pedagogical competence abilities should begin already with the professional pedagogical self-determination indicated by the school graduate. In this regard, the research in the field of designing innovative approaches towards vocational guidance of students to choose the pedagogical areas of training, the development of potential pedagogical inclinations in children, the upbringing of the desire to develop and achieve mastery and success has been updated.

Alongside with the established requirements for educational institutions to acquire knowledge, competences and abilities, employers seek the so-called 'soft' skills of students and graduates. This is expressed in an increasing demand for unconventionally-thinking teachers who are able to respond flexibly to changes in professional environment, who are able to conduct a constructive dialogue, creatively solve pedagogical problems, etc. (Yarkova & Cherkasova, 2016). In this regard, in pre-vocational training, it is necessary to correlate the requirements of employers and professional pedagogical standards with the abilities of future teachers.

Since 2018, the "Distributed pedagogical class Teacher of the Future has been operating at the Institute of Education, I. Kant Baltic Federal University (Kaliningrad) (Budarina et al., 2019). The general goal of designing such classes is to provide vocational guidance for students in grades 10-11 and their introduction to professional culture through an additional (university) part of education with the implementation of an individual curriculum at the request of the student.

The project aims at teaching the basics of the profession, the development of soft skills, understanding the concepts of 'an image of the future' and 'professions of the future'. During the training, high school students master the activities of a volunteer, an assistant counselor and a mentor (Budarina et al., 2018).

According to the results of the project, a 'pending contract' is envisaged, referred to target places in pedagogical areas of training and additional rating points when admitted to the IKBFU on the basis of the acquired training certificate. The main (school) part of the programme is provided by the school. The duration of the programme is 2 years.

Purpose and objectives of study

In order for contemporary students to be successful in their adulthood, it is necessary within their schooling period to develop competencies of the 21st century such as critical thinking, creativity, communication and cooperation, that will help navigate rich flow of information in an ever-changing world and provide students with life-long learning skills and competences (About 4 Key Competences Tool, n.d.).

The results of the analysis of special literature show that in science today there is no universally accepted and unambiguous meaningful interpretation of the term 'soft skills'. Partnership for 21st Century Skills highlights critical thinking, creativity, communication, and cooperation as an important part of the framework that defines learning in the 21st century (Four Key Competences: Measuring critical thinking, creativity, communication, and cooperation, n.d.; Partnership for 21st Century Skills, n.d.). The need to develop 21st century skills is also recognized in Russia: nowadays federal educational standards of primary and general education state the necessity of acquiring meta-subject and personal results of schoolchildren, which, in essence, reflect some competencies of the 21st century (About 4 Key Competences Tool, n.d.).

However, a number of questions arise: how to integrate soft skills into the curriculum, how to develop them using the appropriate pedagogical strategies, and finally, how to evaluate them?

By pedagogical strategy we mean "skillful leadership, a consciously constructed set of pedagogical actions adequate to the pedagogical goal, carried out sequentially and in stages and deployed through the qualitative selection of pedagogical support: the content of the academic discipline/subject, the flexible use of forms, methods, techniques and tools aimed at implementing a specific strategy" (Yanova & Ignatova, 2011, p. 137). A pedagogical strategy is considered, on the one hand, as an activity in which a goal is highlighted, as a strategic landmark, and the means of achieving it. On the other hand, a pedagogical strategy is a process that takes place over time, representing a set of appropriate actions aimed at achieving a specific result.

As a result of such actions, all subjects of the educational process accept the appropriate values, acquire and update the necessary competencies to achieve the strategic goal and fulfill professionally and personally significant strategic tasks.

Donina (2014) identifies three main pedagogical strategies: orientation, interaction and support. The orientation strategy involves the implementation of a set of educational activities of a familiarization or recommendatory nature, aimed at achieving a specific result by directing students to achieve any goal, assistance in finding guidelines for activities. We can distinguish the following pedagogical methods of

orientation: to acquaint, pay attention, guide, support, promote, provide, predetermine, activate, contribute to an adequate assessment, correct, adapt, provide self-education and others (Information Resource Management Association USA, 2020). The interaction strategy is of an active nature and involves the provision of opportunities and the creation of conditions for inclusion in any activity. In our case, this strategy has two interpretations: interaction with a professional community (for example, an association of young teachers), and interaction with a group of strategic partners of a general education organization (for example, Resource Centers on the basis of an educational establishment).

The support strategy reflects the guided side of the human development process in the system of social and pedagogical interaction with other people. In the process of the individualized support, the person is independent in making decisions, which allows to reveal the term 'support' through the creation of conditions for the individual to make decisions in a situation of choice.

The purpose of the research is to determine the basic pedagogical strategies for the development of soft skills among students of a specialized pedagogical class during the educational process and extracurricular and after classes activities.

Methodology

Pedagogical strategies for the development of soft skills of students in the pedagogical class are based on the following provisions:

- understanding of the strategic purpose (mission) of training in a specialized pedagogical class and ensuring the high quality of education as matching the achieved level with the requirements;
- the strategic goal of establishing the competitiveness of students in a distributed pedagogical class and achieving unique competitive advantages that ensure sustainable development in a competitive environment by finding their own unique position;
- tactical objectives aimed at creating a system of pedagogical support for the formation of each subject of the educational process as part of the information and professional environment and the implementation of the relevant organizational and pedagogical conditions;
- the achieved results at the organizational and personal levels.

This allows us to distinguish three main components in the development of soft skills among students of the pedagogical class:

1) the block of the development of cognitive abilities: the ability to think critically (the development of the relationships within the paradigms of 'teacher - student', 'student - mentor', etc.); the formation of project thinking (the ability to foresight, goal-setting); development of decision-making skills in time constraints (reaction speed, data processing speed);

2) the block of development of activity abilities, such as leadership qualities, the ability to manage oneself and the audience (organizational abilities, teamwork); the ability to create texts and discourses, the ability to visualize information; ability to interact with other people;

3) a block of the development of personal abilities: the ability to speak publicly (the ability to correctly and clearly express one's thoughts, captivate the audience with the prospect of an interesting and useful work, presenting oneself); communication skills; creativity.

The diagnostic tools proposed for assessing the development of soft skills among students of a specialized pedagogical class have been comprised from the following psychodiagnostic methods: sociability assessment method – Ryakhovsky Test (Karelin, 2005), expert assessment of the cohesion of the study group (Fetiskin et al., 2002), a technique for diagnosing an interactive personality orientation by Shchurkov in a modification of Fetiskin (Fetiskin et al., 2002), a method for diagnosing motivational orientation in interpersonal communications by Ladanov, Urazaeva (Fetiskin et al., 2002), a technique for diagnosing personal creativity by Tunik (Fetiskin et al., 2002), a questionnaire "Styles of Thinking" – an adapted version of the questionnaire by Bramson, Harrison translated and adapted by Alekseev (Psychological laboratory).

Of a special interest to us in the framework of this study have been the results of applying these methods at the end of the school year.

To assess the changes in the methodology where the result was measured by the level of the attribute, the G-criterion was used. The sign criterion G is intended to establish the general direction of the shift of a characteristic under study. It allows one to establish in which direction in the sample as a whole the values of the attribute change during the transition from the first measurement to the second: whether the indicators change in the direction of improvement, increase or gain, or, conversely, in the direction of deterioration, decrease or weakening. The study involved 67 students.

Results

After the implementation of the two-year programme, the following results were obtained. It can be reliably argued that the majority of students in the pedagogical class have increased the level of their sociability ($p \leq 0,05$). They have become more inquisitive, more willing to listen to their interlocutor, more patient in communicating with others. We have discovered the fact that in personal contact high school students are disposed to friendly interaction, while in social networks, still not everyone can steadily promote their attitude and defend their point of view.

During this period, the level of group cohesion has significantly increased from medium to high ($p \leq 0,05$). In such a team, the personality of each student is appreciated and respected, they not only carry out active significant activities within the class, but also have a positive impact on others. It should be noted, however, that from the very beginning of the training period, the students didn't get divided into separate groups according to their sympathies, common interests, etc.

By the method of diagnosing an interactive personality orientation, one can detect a tendency to the increase of answers on the scale of 'Orientation to Interaction', and the decrease on the scale of 'Marginal Orientation'. The orientation to interaction and cooperation with other people is associated with the need to maintain constructive relationships with the members of a small group, empathy and interest in joint activities. As a rule, a high level on this scale corresponds to optimal socialization and adaptation. Marginal orientation is expressed in a tendency to be conditioned by circumstances and impulsive behavior. This group of people is characterized by manifestations of infantilism, uncontrollability of actions, and imitation. Orientation to personal interests, which is associated with the predominance of motives for one's own well-being, has not changed in general.

The results of the diagnostic methodology for motivational orientation in interpersonal communications were poorly differentiated. From the scales 'Orientation to partner acceptance', 'Orientation to the adequacy of perception and understanding of the partner', 'Orientation to compromise', it was not possible to single out the dominant in the responses of adolescents. We can only talk about the tendency towards the increase of the overall level of results.

Of the styles of thinking, the pragmatic style is least prominent, both at the beginning and at the end of the programme. The dynamics are visible in the increase in the number of students who have acquired a more pronounced analytical and synthetic thinking styles.

The level of personal creativity has increased slightly in the group, although not enough for a reliable assessment. This indicator is well manifested within the project work during the first and second years of study. The projects implemented at the end of the training programme are much more thoughtful, meaningful, and original.

The data obtained allow us to conclude that the programme can contribute to the development of soft skills of students in the pedagogical class. In addition, such training can correct the vivid manifestations of adolescence using the pedagogical strategies described in this paper.

The development of soft skills has been introduced by us into the educational programme and the manuals. For students we have designed a Workbook 'The Teacher of the Future', which they complete in the learning process (Budarina et al., 2018). The specifics of the implemented programme is as follows. The obligatory elements are training sessions, teacher training workshops, teacher practice and extracurricular/ after class activities.

During the training sessions such forms as frontal, group, paired and individual forms of work, and the collective activity of students are implemented. The programme provides for the independent work of schoolchildren: writing reports, essays, creative works, performing independent practical and research work on pedagogy and pedagogical design.

A pedagogical workshop within the framework of the course study provides for forms of work in which high school students receive basic information about professional pedagogical activities, sample elements of educational activity, develop specific pedagogical skills, and determine the willingness to perform professional tests.

An obligatory part of the training is teaching practice. Pedagogical practice holds one of the leading places in the system of vocational guidance training in the pedagogical class. The purpose of pedagogical practice is the identification by senior pupils of their pedagogical abilities, the acquisition of initial experience in pedagogical activity, the deepening of theoretical knowledge and their application in solving specific pedagogical problems.

Within the period of pedagogical practice the students carry out some activities of the assistant camp counselor, starting with a general acquaintance with the educational process, observing and analyzing the information received, complete complex and responsible tasks, organize and conduct events.

Teaching practice also includes volunteering, which has a special role within the programme. The year of 2018 was declared the Year of the Volunteer in Russia. Spending the year of the volunteer was due to the recognition of services to society and the evaluation of the significant contribution of volunteers to the development of the country. Students who have completed volunteer practice get their own volunteer identification with the corresponding certificates, which they get as young people complete volunteer projects or as a result of their volunteer activity (Budarina & Zelko, 2018).

Since the programme lasts two years, students of the second year of study learn another important role for the development of soft skills being the role of mentors for students of the first year of study. An interesting observation was obtained by us and described in a previous study: if previously mentors usually used to be people with experience and knowledge and of much older age, today the fact that the age of a mentor is not critical is generally recognized. In addition, there is a stance that mentors who have a small age difference with their subjects communicate better and find an approach to them more quickly (Zelko, 2018). In addition, we can assume that it is the change of the position from passive to active that critically affects the development of soft skills.

The actualization of the role of soft skills, therefore, should lead to the establishment of the degree of their understanding and mastering by students, as well as the determination of the main areas of development as in the educational process, including the special structure of our programme, which includes extracurricular activities.

The development of soft skills, therefore, involves the consistent study of situations that stimulate the student to make independent decisions, to rely on their own choices, for which they are ready to bear responsibility.

During the training, high school students get acquainted with the basics of pedagogical activity at the theoretical and practical levels, acquire the necessary knowledge, skills and competences of the teacher's profession, and are able to become autonomous in developing pedagogical abilities and organizational skills further on. Therefore, it is important to note that in a specialized pedagogical class the priority issues shift from the development of a certain system of knowledge, skills to the development of those soft skills that will help schoolchildren become full-fledged specialists, ready for successful life in modern society.

The educational programme of the pedagogical class ends with the presentation of a group project in the framework of the international scientific-practical conference (sections 'An Academic Day of Pedagogical Science and Practice', 'A Fair of Youth Projects'), followed by the issue of a certificate of training. The designated set of soft skills can be defined as the 'area of responsibility' of training. However, as noted above, extracurricular educational work also has great potential in their development.

Monitoring the quality of mastering the content of the educational programme can be organized in various ways: a rating system for assessing student achievement, monitoring the level of activity in the classroom, interviews of students and their parents, expert assessments of teachers, the analysis of student work, testing, and using the portfolio method.

Discussions

As a result of the study, we have come to the understanding that evaluating the results of the development of soft skills among students of a specialized pedagogical class using appropriate pedagogical strategies is implemented according to three indicators: tasks, support and resources at three levels: communication with the outside world, self-determination, reflection.

At the level of communication with the outside world, the tasks of teaching are set by the faculty. They are connected with the real world and are based on interaction.

Support at the level of communication with the real world includes various projects for selection, analysis of the student's profile, their skills and interests in order to help form a team.

Resources in this case are involved in the field of online (server space for placing projects and documentation, prospects and requests).

At the level of self-determination, the tasks allow students to make their own decisions within the framework of a specific project (roles, responsibilities, timing, etc.).

Within the framework of support at the level of self-determination, it is indicated by academic and consulting support from teachers and mentors.

The resource block ends up with a weekly review of tasks that are necessary to be finalized, work in social networks, the Trello application.

At the level of reflection, the tasks are associated with its promotion and fixing; the support is associated with the mechanisms that allow for feedback, peer-assessment, and forum format. Resources can help students learn about their own achievements, as well as the achievements of their peers who are also engaged to the maximum degree.

Conclusion

In conclusion, it is important to note that the following ideas are based on the functioning of the mechanisms for integrating soft skills into the educational process of the profile pedagogical class:

1. Immersion of students in quasi-professional and professional activities. It is implemented through the fulfillment by schoolchildren of various roles, recreating the objective and social content of their future professional activity. The student in the team performs quasi-professional activity that carries the features of both educational and future professional activities.
2. Implementation of practice-oriented training. In a specialized pedagogical class, this is a key element in the development of soft skills.
3. Using the case study method being a learning technique that uses a description of real situations. Cases are based on real factual material, or are close to the real situation. Students investigate the situation, understand the essence of the problems, propose possible solutions and choose the best of them.
4. Application of the project approach as the basis of the educational programme. It combines system and process approaches for the analysis and management of projects being unique sets of processes. It is one of the forms of reporting on learning outcomes.
5. The whole learning process is driven by reflective practices. It is aimed at the formation of new views of students, which are productive for the activities of attitudes, changing self-esteem, and team building. The main objectives of reflection are to teach the ways of establishing contact in various situations, to communicate in tense and conflict situations; to expand the range of creative opportunities; to increase emotional stability and reduce tension and self-doubt; to intensify the process of self-knowledge and self-actualization on the personal level.
6. The use of distance learning is a method of communication between the teacher and students using modern telecommunications, and a flipped classroom approach, which allow to ensure maximum availability of the proposed mechanism for the integration of professional and soft competencies. This is an important point, since project work requires schoolchildren and tutors to be constantly involved in the process, which, however, is not always physically possible.

The designed programme for the profile pedagogical class is characterized by integration and combines the following substantive components and organizational features:

- integration of the programme, including educational and social events;
- the educational area combines training in the most popular disciplines for successful admission to pedagogical institutions (the Russian language, Mathematics, Social Studies), and substantial immersion in the humanitarian cultural development, as well as the pedagogical block (Psychology, Introduction into Counseling Activities, the Basics of Volunteering, the Basics of Socio-Pedagogical Project Work);
- teachers - this is the faculty of the Institute of Education, IKBFU, being highly professional masters of their craft and carriers of pedagogical culture;
- educational practices are a unique set of regional, national and international events, projects created for university students and students of the pedagogical class;
- Resource Centers based on the gymnasiums and lyceums of the region are key partners of specialized pedagogical classes;
- the first assistants and curators of students in the pedagogical class are mentors from among university students and schoolchildren.

This means that the following skills of schoolchildren testify to the development of soft skills:

- perform complex and original tasks, distribute roles in the team, carry out joint planning;
- follow an individual educational path corresponding to the interests and qualities of each student;
- learn to use their competencies and knowledge for the independent assimilation of newly acquired knowledge, the search for new information;
- apply accessible modern technologies in the learning process;
- receive and provide support from mentors, discuss their successes and failures with them, plan their own educational route.

Thus, the development of soft skills of schoolchildren in a specialized pedagogical class can be successful if: they are integrated into the educational process, they are developed using the appropriate pedagogical strategies, and the level of their development can be assessed. The development of soft skills with the help of pedagogical strategies is possible in three dimensions: through the learning tasks, through the support of learning, and taking into account available resources.

As the expected result of the programme, we assume the creation of a positively oriented pedagogical community of students with pedagogically supported experience of pre-professional adaptation, individualization, personalization, familiarization with the pedagogical culture. In parallel with this, a segment of the pedagogical community emerge, being focused on the conscious fulfillment of the mission of educating pedagogical professional self-determination among students and further axiological activity in this direction. It is also planned to develop the general pedagogical potential of all the institutions of the educational system, the formation of the experience of social responsibility for the education of future teachers. All this will contribute to the development of soft skills, which will be in great demand in further studies in higher education and in life.

Complexes of measures of pre-university vocational guidance for schoolchildren, no doubt, fulfill the most important propaedeutic function, designed to contribute to conditioning professional self-identification of the senior pupil's personality.

Recommendations

Further research is aimed at clarifying the set of competencies that are part of the soft skills structure, as well as finalizing diagnostic tools that make it possible to draw up a student's profile based on diagnostics to determine the further educational route at the Institute of Education, IKBFU.

References

- About 4 Key Competences Tool (n.d.). Retrieved February 20, 2020, from <https://ioe.hse.ru/monitoring/4k/monitoring>
- Budarina, A. O., & Zelko, A. S. (2018). Management of social projects in higher educations: setting objectives for implementing educational activities. *The European Proceedings Social & Behavioural Sciences EpSBS, XLV*, 1-7.
- Budarina, A. O., Zelko, A. S., & Mishurovskaya, T. P. (2019). The Implementation of the profiled pedagogical class model in the framework of continuous teacher education. In *"New Silk Road: Business Cooperation and Prospective of Economic Development" (NSRBCPED 2019)* (pp. 773-776). Atlantis Press.
- Budarina, A. O., Zelko, A. S., & Parakhina, O. V. (2018). *Teacher of the future: Workbook. Part one*. Kaliningrad: IKBFU Publishing House.

- Donina, I. A. (2014). The pedagogical strategy of the formation of competitive staff of a general educational organization. *Sovremennyye problemy nauki i obrazovaniya - Modern Problems of Science and Education*, 6. Retrieved March 29, 2020, from <http://www.science-education.ru/ru/article/view?id=15541>
- Fetiskin, N. P., Kozlov, V. V., & Manuylov, G. M. (2002). *Socio-psychological diagnostics of the development of personality and small groups*. Moscow: Institute for psychotherapy.
- Four Key Competences: Measuring critical thinking, creativity, communication, and cooperation* (n.d.). Retrieved March 23, 2020, from <https://ioe.hse.ru/monitoring/4k>
- Information Resource Management Association USA (2020). *Learning and performance assessment: Concepts, methodologies, tools, and applications*. IGI Global.
- Karelin, A. A. (2005). *Great encyclopedia of psychological tests*. Moscow: Eksmo.
- Partnership for 21st Century Skills* (n.d.). Battelle for Kids. Retrieved February 15, 2020, from <https://www.battelleforkids.org/networks/p21>
- Psychological laboratory. Retrieved February 20, 2020, from <https://psylab.com.ua>
- Yanova, M. G., & Ignatova, V. V. (2011). *Formation of organizational and pedagogical culture of the future teacher*. Krasnoyarsk: KGPU Publishing House.
- Yarkova, T. A., & Cherkasova, I. I. (2016). Formation of flexible skills among students in the context of the implementation of the professional standard of a teacher. *Vestnik Tyumenskogo gosudarstvennogo universiteta. Gumanitarnyye issledovaniya. Humanitates - Bulletin of the Tyumen State University*, 2(4), 222-231.
- Zelko, A. S. (2018). The experience of student mentoring in working with students of the pedagogical class. *Vestnik pedagogicheskikh innovatsiy - Bulletin of pedagogical innovations*, 4(52), 99-103.