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Role of foresight sessions in professional self-development of students

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ABSTRACT

The rapid development of innovative technologies and the rapid change in the social environment necessitate the search for tools for the formation of professional competence that meet the modern requirements of training students in vocational educational institutions. Purpose of the article: analysis of the implementation of foresight sessions in the professional self-development of students. Methodology: the article presents the dynamics of student participation in foresight sessions, an increase in the number of students over several years, as well as the results of a survey of participants in foresight sessions to determine the advantages of the method. Results: Conducting foresight sessions expands the possibilities of forming the professional competence of future specialists.

KEY WORDS: foresight sessions; professional self-development; students; professional education; professional competence.

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Papel de las sesiones prospectivas en el auto desarrollo profesional de los estudiantes

RESUMEN

El rápido desarrollo de tecnologías innovadoras y el rápido cambio en el entorno social requieren la búsqueda de herramientas para la formación de competencias profesionales que satisfagan los requisitos modernos de la formación de estudiantes en instituciones de educación profesional. Propósito del artículo: análisis de la implementación de sesiones de prospectiva en el autodesarrollo profesional de los estudiantes. Metodología: el artículo presenta la dinámica de la participación de los estudiantes en las sesiones de prospectiva, un aumento en el número de estudiantes a lo largo de varios años, así como los resultados de una encuesta a los participantes en las sesiones de prospectiva para determinar las ventajas del método. Resultados: La realización de sesiones de prospectiva amplía las posibilidades de formación de la competencia profesional de futuros especialistas.

PALABRAS CLAVE: sesiones de prospectiva; autodesarrollo profesional; estudiantes; formación profesional; competencia profesional.

Introduction

The development of vocational education is one of the key tasks of state policy. In the current conditions, the role of the introduction of innovative technologies in the training of students, contributing to the professional self-development of students and the formation of professional competence, is increasing.

The new reality actualizes the formation of the ability to make operational decisions. The classical method (making decisions based on experience) has specific features. The social environment is changing so quickly that the previously applied effective models do not have the same effectiveness.

Innovative ways of making decisions based on a vision of the future that takes into account current trends and the prospect of their development are the most relevant, providing ample opportunities for training a highly qualified specialist (Shabalina et al., 2019).

The thinking of a modern student should be directed to the creative solution of problems in several ways. In addition, a competitive specialist should anticipate all possible solutions to situations, existing risks as much as possible and assess them (Dobudko et al.,

2019). Proactive thinking, which involves the selection of options for getting out of any difficult situation, acquires a high value in contrast to reactive thinking (Ponachugin & Lapygin, 2019). In this case, the specialist is ready for changes, can take into account risks and see this not as a problem, but as a new opportunity (Aniskin et al., 2020).

Therefore, universities are looking for ways that are most relevant in the formation of a student's professional competence in modern conditions. Today, one of the most effective tools in the organization of professional self-development and the formation of competence are foresight sessions.

Purpose of the article: analysis of the implementation of foresight sessions in the professional self-development of students.

In this regard, it is necessary to reveal the essence of foresight sessions and the peculiarities of their application in the preparation of students.

Foresight sessions perform the functions necessary for the formation of competitive specialists:

- implementation of a set of measures aimed at personal and professional self-development of students;
- accumulation of resources aimed at forming ideas and developing prospects for the future activities of students (Vaganova et al., 2019a);
- creating conditions for the development of the internal potential of the individual, understanding of key goals and objectives, increasing motivation, trajectories of professional self-determination (Vaganova et al., 2019b).

Their task is to ensure that students can jointly agree on the future, taking into account existing factors that affect the situation. In this case, the development of projects by students becomes the most effective and promising (Bulaeva, et al., 2018).

Foresight sessions have a practice-oriented developing potential. In the process of their implementation, students' competencies are formed, which are necessary to achieve sustainable changes in the personal and professional sphere.

As the training of students improves and foresight technologies develop, there is a need for timely monitoring of educational processes.

1. Theoretical framework

Foresight sessions are considered by researchers from different points of view:

- as an innovative way to conduct brainstorming sessions;
- as a way to predict the future (Demidov & Tretyakov, 2016b);
- as a group activity, the purpose of which is to create a certain future (Chulanova, 2018).

The use of foresight sessions performs several functions, including:

- forecasting;
- design;
- formation of project groups (Rojas-Bahamón, Aguilar-Cruz & Arbeláez-Campillo, 2020);
- projection (Vardanyan et al., 2018).

Foresight is created on certain principles. Firstly, it should be said that the future depends on certain actions and it is possible to influence it, secondly, the future has a great variability (Vaganova et al., 2019a), thirdly, it is possible to make forecasts to the future, but it is difficult to predict its reliability, but you can prepare for it (Tezer et al., 2019).

Various tools are used for conducting foresight sessions: staging, SWOT analysis, forecasts, panel discussions, and others (Nagovitsyn et al., 2020).

Foresight has a specific terminology that includes trends, that is, a significant direction of development; a package of solutions for the formation and development of a new trend (Yarygin et al., 2019); social interaction (Pichugina & Bondarchuk, 2019); processes that can affect the increase in time spent on project implementation; a roadmap (a visual image of the future, which includes key trends and events, technologies and strategic plans) (Shcherbakova & Shcherbakova, 2019).

Trends can be different (stable, uncertain or fading). The figure (1) shows three types of trends.

A change in the type of trend is preceded by an event that radically changes the situation. In this case, the participant of the foresight session begins to work with the emerging trend as a separate one.

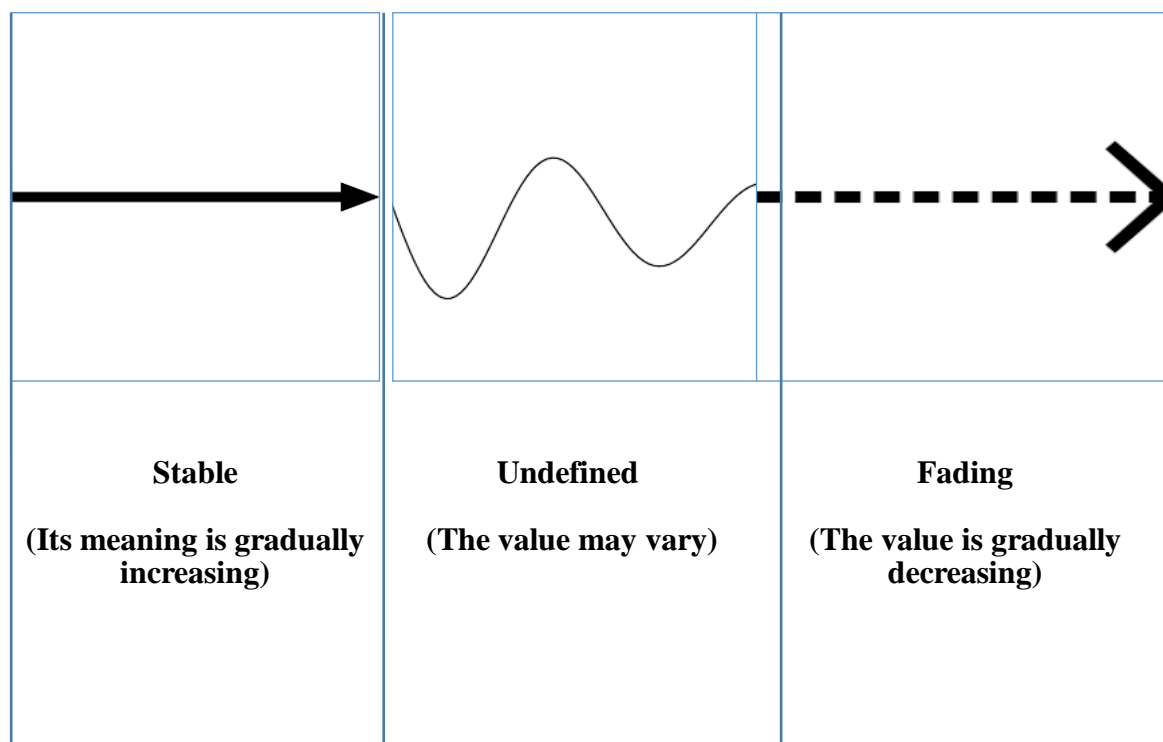


Fig. 1. Characteristics of trends taken into account during foresight sessions (compiled by the authors based on the analysis of scientific research)

The following features are distinguished in the specifics of conducting foresight sessions:

- collective work is carried out with images and diagrams;
- working with road map templates and event cards (Bosco, 2008);
- no extra papers;
- maximum visualization of information, increasing visibility, using infographics (Demidov & Tretyakov, 2016b).

The results obtained are highly reliable, characterized by capacity and adaptability.

The implementation of the foresight session takes into account the past, present and future. The figure shows a coordinate system that includes the development of the project in three dimensions.

Participants of foresight sessions consider the probability of the development of certain events not separately, but together, designing their current and future activities to achieve positive results and eliminate negative impacts.

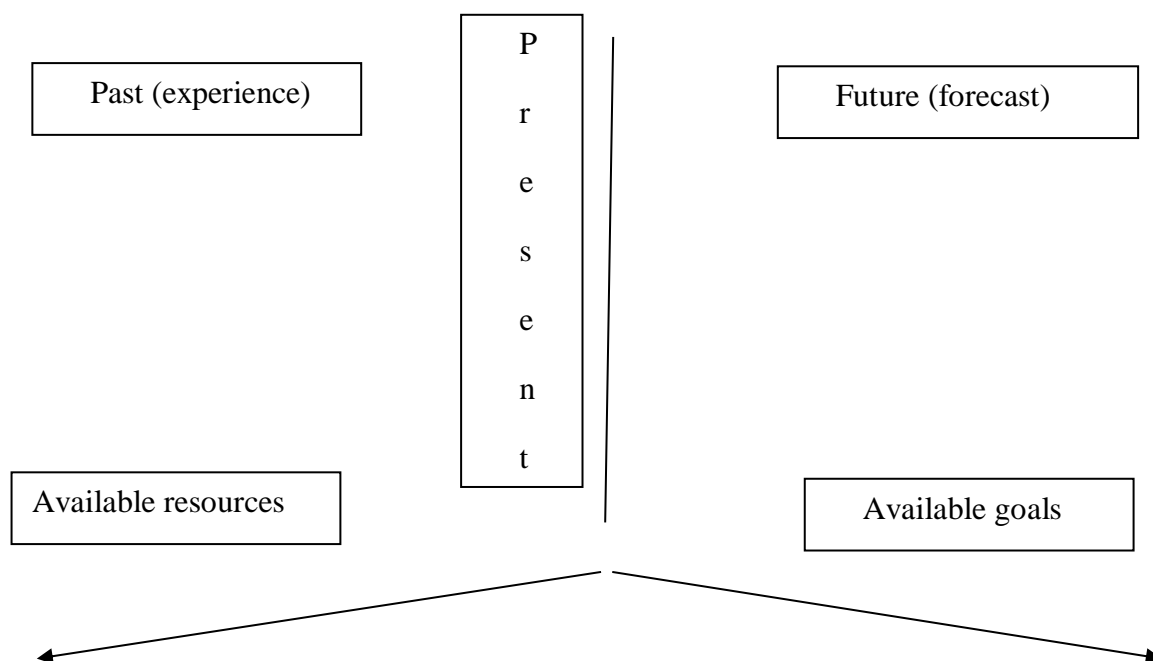


Fig. 2. Directions were taken into account when implementing a foresight session (compiled by the authors based on the analysis of scientific research)

2. Methodology

The study presents the dynamics of students' participation in foresight sessions over a three-year period from 2019 to 2021.

To survey to determine the advantages of foresight sessions among students of professional educational institutions, three groups of 150 people each (students of the 2nd, 3rd and 4th courses) were identified. Only senior students took part in the study, since the 1st year is undergoing a period of adaptation to studying at a higher educational institution and to a greater extent cannot assess the impact of foresight sessions.

Students had to choose the benefits of prospecting sessions from the list presented (or include their own), which included options such as:

- High level of systematization of own activities;
- Forms the ability to predict and plan
- Forms the experience of working in a group
- Motivated on the study of new topics
- Promotes involvement in the educational process

- Forms self-discipline
- Creates a sense of responsibility for the overall results
- Promotes the formation of an understanding of the prospects for future self-development
- Forms creative independence
- Reveals the possibility of self-determination during the session
- Formation of independence;
- Formation of communication skills.

The survey was conducted in 2021. The most common responses were highlighted. The data is displayed in a separate chart.

3. Results and discussion

During foresight sessions, the energy of positive thinking of the working team is activated. The teacher aims students at positive thinking and creates an atmosphere of emotional trust (Nagovitsyn et al., 2020). At the same time, the stages of creative and analytical thinking are combined.

Foresight includes several levels of activity:

- working in the present (working with cards, discussing issues among participants, moderation of the process) (Vaganova et al., 2020);
- planning (selection of information, analysis, determination of prospects and viability of ideas) (Demidov & Tretyakov, 2016a);
- planning (conducting strategic analysis and determining priorities in the project) (Kidina, 2020);
- networking (selection of tools that contribute to the creation of an effective dialogue between the subjects of the educational process, between working teams participating in projects) (Kiseleva et al., 2019).

Foresight is organized in several stages. The table shows the stages of students' work.

Table I. Stages of conducting a foresight session (compiled by the authors based on the analysis of scientific research)

Stage	Characteristic
Preparatory	Formation of groups of participants; and analysis of sources; mastering the previous experience of conducting foresight sessions; analysis of the opinions of various researchers in the field under study; analysis of the opinion of society (social networks, forums, etc.)
The stage of the direct foresight session	Conducting active group work among the teams of participants (brainstorming, expert panels, conducting surveys, SWOT, forecasting) , organizing game situations in which the student can experience emotional and behavioral experience
Reflection	Studying the behavioral mechanisms of each participant, correcting mistakes to achieve better results

The development and implementation of foresight tools are carried out through the project activities of students.

Foresight sessions are held both in classrooms and remotely. Today, a popular game among students is the game of the future, in which students need to determine what changes have occurred over a certain period in a small amount of time.

Each team receives a description of trends that have occurred over a ten-year period.

Among the tasks of students: a description of the impact of changes that affected the work in 2030, a description of the working day and the working functions of specific specialists in 2030.

The teams exchange data and ideas, which are reflected on the worksheets. The task of the teams is to identify and remove duplicate ideas. Students note what needs to be done to ensure that the expected trend begins to develop today (Pinkovetskaia et al., 2020).

Also, the work of subgroups is organized to solve more global issues, for example, the development of various sectors of society. In the process, maps of the future are developed based on existing trends.

The students have identified for themselves the main element on which it is worth focusing – it is the involvement of the younger generation, young highly qualified specialists in innovative activities.

In the process of active activity, the technical assembly of materials for the foresight session is carried out. Structured information is a source that you can turn to throughout the study, understand which ideas were the most relevant and continue working on the project based on them.

Students actively participate in foresight sessions. The figure shows the results of the analysis of the number of participants.

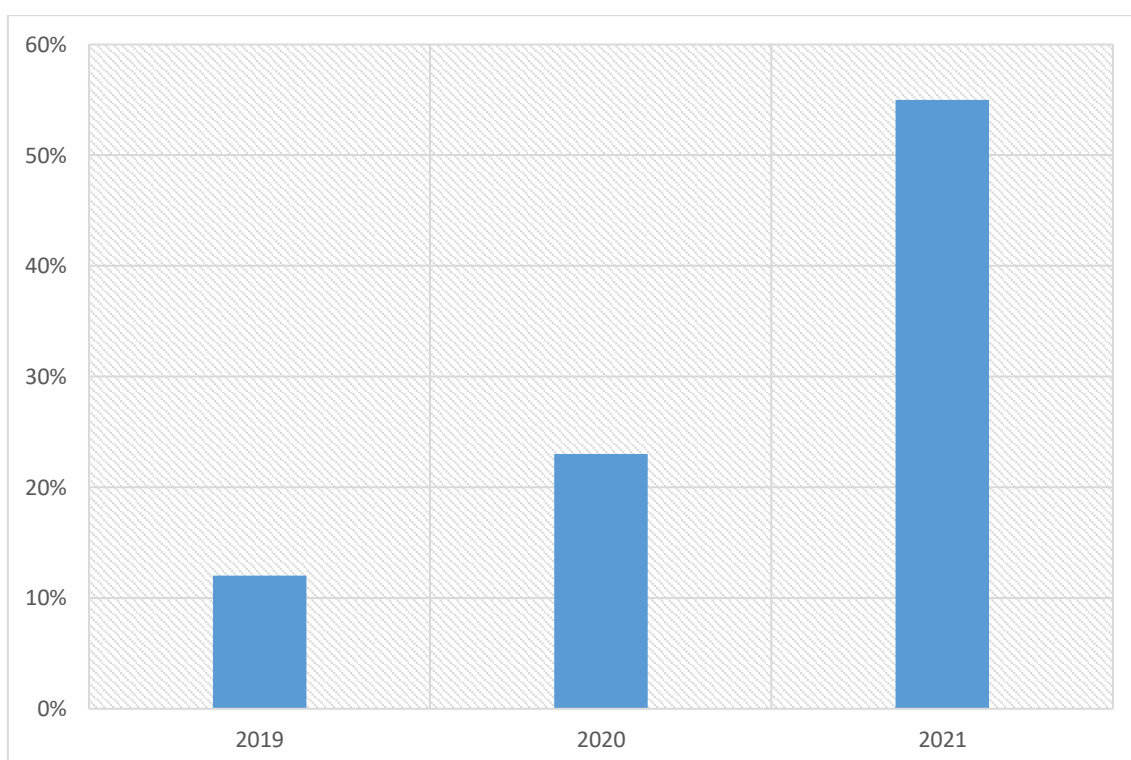


Fig. 3. Increase in the number of participants in foresight sessions for the period from 2019 to 2021 (Dedov, Fantalova, Vaganova, Lapshova, Kuznetsov)

The increase in the number of participants in foresight sessions by 2021 was 55 %. The use of this tool in the training of students shows the interest of students in such projects. Universities are expanding the implementation of foresight to form the need for constant self-development and professional competence.

The diagram shows the results of a survey of participants of foresight sessions to determine the advantages of the method.

The diagram shows the most popular answers among students.

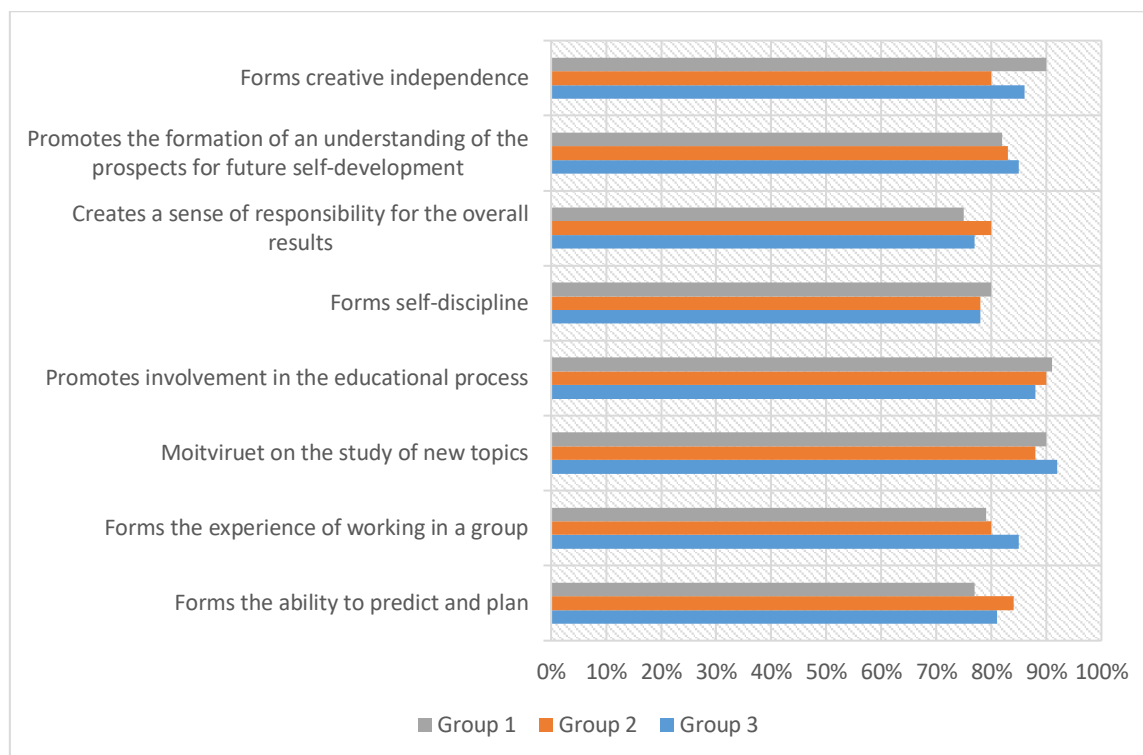


Fig. 4. Increase in the number of participants in foresight sessions for the period from 2019 to 2021 (Own authorship)

Based on the data obtained, it is worth saying that foresight sessions help students study materials in more depth and motivate them to independently solve professional issues, thereby developing the need for constant self-improvement.

Conclusions

Conducting foresight sessions plays a significant role in the professional self-organization and professional self-development of students. During their implementation, students are independently involved in creative activities, are engaged in planning and forecasting, select the necessary data to achieve results, relying on the consulting role of the teacher.

Conducting foresight sessions in a modern educational environment allows students to feel themselves in real professional conditions.

Due to the development and improvement of foresight sessions, creative independence and independent students' activity is formed. Students improve their ideological position in determining their capabilities within the framework of the needs of the labor market.

The study shows that the number of participants in foresight sessions is growing every year. Students note the importance of holding events within the framework of foresight sessions, since they increase the need for constant professional self-development, in-depth study of the material.

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