Multimodal learning strategy role in the formation of value orientations of the student youth

Galina Lemeshko¹,² Elena Zubareva¹, and Svetlana Zubareva²

¹ Don State Technical University, Gagarina, 1, Rostov-on-Don, 344000, Russia
² South-Russian Institute of Management of Russian Presidential Academy of National Economy and Public Administration, 70/54, Pushkin Str., Rostov-on-Don, Russia

Abstract. The purpose of this research is to study the exceptional nature of modern conditions for inculturation in higher education is, in particular, due to the introduction of a multimodal learning strategy into the educational process, focused on the training of broad specialists in terms of transitional economy. The paper presents a comparative analysis of the values of two generations of the student youth, formed in two fundamentally different systems of training highly qualified personnel. Modern methods of data analysis have made it possible to draw up a portrait of a modern student of higher education, including his/her needs and interests. The analysis showed that the use of the possibilities of a multimodal learning strategy contributed to the strengthening of individualism, a broad worldview were formed among young people. To improve the quality of training highly qualified personnel, it is proposed to shift the vector of a multimodal training strategy from solving urgent problems of economic markets to the mental needs of a person, which is a key link in the sustainable development of the economy.

1 Introduction

Global competitiveness means that global markets choose a certain specialist, certain products, specific knowledge, skills, experience due to their competitive advantages. But, in its turn, global competitiveness gives the right to choose the best conditions for the application of the skills and abilities. In global competition, young Russian specialists win thanks to a multimodal learning strategy in the modern higher education, which forms, first of all, the skill of effective management, that becomes an additional advantage in any global competitiveness.

The change in the traditional model of development in the global world has led to changes that occur at a speed that does not allow even to fix stable stages of development, as well as periodically arising external challenges, technological and social transformations. The modern business model does not involve the gain of momentary profit, but the reproduction of business processes, the transformation of material, labor, financial,
intellectual resources, the surrounding and social environment based on a long-term vision, risk and opportunity management. The implementation of such a business model is possible, firstly, in case of a change in the indicators of the business plan and strategy, organizational structure, decision-making methods, business rules and theoretical views on its development; secondly, focusing attention not on the final goal, but on the transformations that are necessary to achieve technical, financial and social engineering; thirdly, understanding and perception of private business as a part of an ecosystem – a minimum set of resources and participants that ensure the continuous reproduction of business facing constant changes. Apparently, the key indicators of business plans and strategies are being replaced by descriptions of business models that provide sustainable solutions to the challenges of the current day for the benefit of future generations. In these conditions, there is a demand for specialists who are able to take creative decisions quickly, making the need to introduce a multimodal learning strategy into the modern educational space of higher education relevant.

The multimodal learning strategy makes the formation of individual educational trajectories possible that contribute to the disclosure of human potential and the formation of relevant highly demanded competencies due to the openness of the content of the educational module, its update and timely adaptation to modern conditions of professional activity at enterprises. The generation of modern young professionals who have been trained in the framework of a multimodal strategy are superior to older colleagues in the speed of processing information, presenting results and predicting the results of decisions made. At the same time, their value orientations differ significantly, by which young people are guided when choosing one or another path of building a career and life scenario. As we can see, the transformational analysis of the current state requires a creative look at the existing connections and proportions and the readiness for changes in these connections, balanced and proportional even facing the most crisis-related external and internal challenges. This is the purpose of the study.

2 Literature review

Within modern conditions of transitivity of the global and national economy, the issue of training highly qualified personnel capable of ensuring intensive economic development is especially relevant. To achieve this goal, a multimodal learning strategy was integrated into the modern educational space. The modern multimodal learning strategy is considered by a part of the professional community that develops the problems of generational change, issues of education and developmental psychology. So, for example, V. Pishchik, N. Sivrikova and others in a number of empirical studies have revealed significant differences between representatives of generations in terms of measured indicators [1-4]. These researchers often use a generational approach to characterize the subjects of the modern educational environment in which a multimodal learning strategy is integrated. In recent works by V. Pishchik, it is shown that in the group of lecturers of the “transitional” generation, factors of readiness, attitudes towards retraining and activity of innovation are expressed, while lecturers of the “information” generation have expressed attitudes towards retraining, readiness to make suggestions [5]. Recent results of N. Sivrikova's study revealed the existence of a connection between the assessment of the formation of the conflictological component of the lecturer's image and the motivation of future professional activity; the desire to be a lecturer and work in the profession is associated with such components of the image as “positive goals”, “equal communication” and “personal choice” [6]. V. Kotlyarova, in her research focuses on the communication skills formed in the process, which represent a “product” acquired by a person, a consequence of personal and “technological” growth in the process of using ICT [7]. According to V. Kotlyarova,
the practical task of mastering the communication skills of an individual in the course of using information technologies requires finding ways to improve the communication process. Undoubtedly, this structural component introduced into the educational process of training highly qualified personnel is a clear illustration of the transformation of the training strategy to the needs of the modern economy.

In international published scientific studies by A. Jain, M. Savin-Baden, T. Barker, the life cycle of transformations is implemented in accordance with the following principles: “envision”, “engage”, “transform”, “optimize” [8-10]. Of course, each economic regime has its own distinctive features, key principles, traditions and pivots, but the key element of any economic system is the human resource. It is human resources as part of the country’s population that are a factor in economic development and economic transformation along with tangible resources [11]. There is an urgent need to prepare this resource, train it and focus on sustainable development through the introduction of new learning strategies in the process of training highly qualified personnel and the transmission of key socio-cultural values, which will let introduce and maintain positive international experience, create a critical mass of followers of effective economic traditions and create an ecosystem, eliminating the level of external and internal threats.

Despite the existing range of studies focusing on the problems of training highly qualified personnel and the axiosphere of various generations, the role of a multimodal learning strategy in shaping the value orienations of the student youth has not yet been considered in the scientific papers published to date. As it seems, it is necessary due to the increased popularity of this educational approach and its insufficient research.

3 Materials and methodology

A multi-methodological approach was used to collect, process and analyze data: the accuracy and unambiguity of the research results are confirmed by using standardized data analysis procedures using the Deductor Studio 5.3 analytical platform, processing the initial statistical information with application packages of SPSS 17, Statistica 10, MS Excel, as well as using methods of cluster analysis (k-means, hierarchical clustering), data mining (associative rules), tabular and graphical methods for visualizing research results.

Within this research, key features of subject-subject and subject-object relations in the educational space of higher education were identified in an intergenerational comparison by conducting a study using M. Rokeach's method of studying value orientations, based on direct ranking of the list of values.

The pilot study involved students aged 18, faculty staff, advanced scientists. The selection consisted of 1150 people. The objects of the study are representatives of two generations of advanced scientists and the student youth. The subject of the study is the dynamics of change in instrumental and terminal value orientations that can be changed in the context of the implementation of a multimodal learning strategy in higher educational institutions.

The purpose and objectives of the study are to identify and evaluate the effectiveness of the implementation of a multimodal learning strategy in higher educational institutions, which is reflected in the system of value orientations of modern student youth, their life strategies and professional principles.
4 Results

4.1 Research stages

In conditions when existing economic models lead to various crisis situations, there is a need to search for new approaches to understanding ongoing processes at the interdisciplinary level.

At the first stage, a group of tutors conducted an axiological study testing students of higher educational institutions during interactive classes with online and offline technologies in order to determine which terminal and instrumental values are included in their value system. Further, a similar testing of the faculty staff from among the representatives of the generation of the 1960-1980s was carried out, since it is this generation that is the core of the economically active population at the present time.

Fig. 1. The terminal values orientations of modern student’s youth.

As can be seen from Figure 1, the value system of generations of modern student youth and advanced scientists includes such terminal values that determine the choice of a life scenario as self-realization, sense of accomplishment, social recognition, self-respect. However, the dynamics of these life values from the generation of student’s youth to advanced scientists demonstrates a significant share these values.
Dynamics of the instrumental values orientations of modern student’s youth and advanced scientists

<table>
<thead>
<tr>
<th></th>
<th>Ambition</th>
<th>Responsibility</th>
<th>Independence</th>
<th>Width of views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced scientists</td>
<td>41%</td>
<td>55%</td>
<td>49%</td>
<td>71%</td>
</tr>
<tr>
<td>Student’s youth</td>
<td>14%</td>
<td>19%</td>
<td>51%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Fig. 2. The instrumental values orientations of modern professors and scientists.

As can be seen from figure 2, the system of values of generations of modern student youth and advanced scientists includes such instrumental values that, in their turn, determine the professional development trajectory of young specialists, such as ambition, responsibility, independence, width of views. However, the dynamics of these strategic values from the generation of student’s youth to advanced scientists demonstrates a significant share these values with one exception – independence.

Basically, the analysis of the system of value orientations of two generations reveals certain trends, for example, self-respect and width of views are of essential importance for both generations, while social recognition and ambition are the least significant, because for many generations labor activity meant serving the people, the country and the party in order to get closer to the era of communism, which is significantly different from the values of the capitalist system [12]. As part of the continuity of generations, it was possible to instill successfully a broad outlook into the younger generation, despite the dominance of the fundamental principles of the capitalist system, as well as European values. This is important, since these principles are decisive in the process of communication [13].

The mentioned principles of independence and broad outlook are the foundation for sustainable economic development, which is necessary to preserve the environment for present and future generations, fight with social inequality, protect human rights and resist corruption, create a creative and socially responsible business model that provides a dynamic, profitable, organic development based on modern digital technologies and risk management according to national and international standards.

4.2 Research description

One of the key principles for introducing innovations into the educational process is to represent the interests of future generations. In this regard, we pay attention to the construction of an individual professional trajectory for the development of modern youth. Thus, according to the results of the study, 45% of young professionals plan to work simultaneously throughout the global world. The unprecedented development of IT technologies and the introduction of new formats of labor relations allow us to implement this plan successfully and manage our professional potential effectively.

Currently the most demanded sphere of activity is the sphere of finance, the sphere of high and nano-technologies, as well as the IT-sphere. However, there is a tendency to plan the realization of one's own professional potential in several sectors, both alternately and
simultaneously. The implementation of such a plan is facilitated by an interdisciplinary orientation, convergence, and the merging of previously separate structures into a single space in which various labor functions can be simultaneously performed.

The young professionals surveyed are considering different scenarios for the development of their professional career, 21% are planning to found their own business, 22% are planning to become skilled workers or specialists, 18% are planning to become employers. The implementation of this trajectory of the development of a professional career is facilitated by the introduction of new forms of labor self-organization, including the development of the institution of the self-employed and individual entrepreneurship. Modern entrepreneurs aged 25-35 have formed a new business environment, demonstrate a responsible attitude towards business as a promising type of activity that can ensure the stable well-being of many families, they are more motivated for success and results.

Special attention should be paid to the youth's vision of the goals, objectives and functions of state structures, business and civil society in the future. In the opinion of future young professionals, the social responsibility of business lies in the simultaneous receipt of profit, employment and the ability to solve social problems. At the same time, social problems in society, should be solved jointly by citizens (25%), business (26%) and the state (49%). There is current trends in the emergence of socially responsible business structures that provide internships at enterprises, provide part-time employment, and provide a platform for the work of organized student labor teams. The development of an active social position is facilitated by the involvement of student youth in volunteer activities, participation in youth movements and organizations.

In general, the combination of modern methods for analyzing big data made it possible to compile a portrait of a representative of modern youth, reflecting his/her basic mental needs, which determine life strategies and professional principles.

A modern young person is less interested in financial activities and work in security agencies, which are popular today, but sees the prospect of agriculture to a greater extent, has an active citizenship and is the main taxpayer, makes him/herself and the business responsible for solving social problems, is ready to trust investment decisions to financial companies and banks to a greater extent. Creation of workplaces due to business by 2030 is essential for them.

Taking into account the results of the study, it is necessary to pay attention to education and science, increase the prestige of regional educational institutions, develop programs for the participation of young professionals in the development of agriculture, and involve young people in solving social problems.

5 Discussion

A multimodal learning strategy is a long-term project for the training of highly qualified personnel, aimed at the formation of a certain worldview, a style of thinking, in which goals, tasks, functions, resources are considered not as fixed restrictions, but as variables. The effectiveness of the strategy is not in its radicality, but in the coordination of actions in various aspects in terms of resources, deadlines, and performers [14]. Within a multimodal learning strategy, activities are aligned to compensate risks and enhance positive feedback [15]. Thus, when planning and designing a multimodal learning strategy, it is necessary, first of all, to focus on the key link in the development of the economy – the human resource.

Considering multimodal learning as a special educational experiment, it is necessary to determine its participants and sources of investment, it should be noted that not only financial and tangible investments, but also intangible resources can be considered as investments. Attracting various types of investments will not only increase various
economic indicators, but also demonstrate relevance, demand, social orientation, interest, and competitiveness.

The role of a multimodal learning strategy in shaping the value orientations of the student youth lies in its potential, the ability to focus on the following value orientations that are significant for modern student youth: employment security, attraction of all sources and types of investment, social responsibility, principle “knowledge = investment”, transformation depending on the supply and demand of the economic labor market [16].

Obviously there will be a need to develop such areas as culture and art, to increase the prestige of the healthcare and education sectors. In this regard, the demand for highly qualified personnel ready to work in these industries will increase, which means that it is necessary now to form appropriate educational modules that meet the needs of the economic labor market.

6 Conclusions

There was determined a correlation between the conditions for learning and key values that determine the choice of a life path and the trajectory of professional career development in terms of determining the role of a multimodal learning strategy in the formation of student youth’s value orientations within the research. In the system of values of generations of modern student youth and advanced scientists, there are such terminal values that determine the choice of a life scenario as self-realization, sense of accomplishment, social recognition, self-respect. The key instrumental values that determine the professional strategy of modern student youth are such values as ambition, responsibility, independence, width of views. This situation illustrates the high level of transitivity of the future socio-cultural situation due to the high level of mental need for self-respect, independence and broadness of outlook.

The portrait of a modern student possible to form a forecast for economic development in the future. The results and conclusions of the study can be used to expand the problematic field of studying youth culture in general and the problems of education, in particular, the prospects for the development of the social institution of education.

References

2. V. I. Pishchik, HSSR 4, 917-930 (2020)
5. V. Pishchik, RPJ 1, 215-236 (2018)
6. N. Sivrikova, V. Zherebkina, M. Postnikova, RPJ 1, 70-87 (2017)
7. V. Kotlyarova, A. Rudenko, P. Ponomarev, CAC 2, 87-95 (2017)
8. A. Jain, D. Dutta, SAJHRM 1, 29-44 (2019)
10. T. Barker, Configurations 1, 87-110 (2019)
