Teachers as Effective Managers for the Adaptation of Sustainable Development Ideas into the Educational Process

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Abstract: The article provides a comprehensive analysis of the ideas of sustainable development by describing the existing contradictions in the system of modernization of higher education. The authors consider the emergence of the concept of sustainable development in the process of combining economic, social, and environmental perspectives. The article also provides a brief information about university teachers as effective managers of the organization of educational and cognitive processes in students. Based on the Aichi-Nagoya Declaration on Education for Sustainable Development and the Process Model, the authors formulate the critical aspects on the university integrated education, which is based on the ideas of sustainable development within the program material of the taught discipline. The main definitions that help to understand the material presented are also provided by the authors.

1. Introduction

Modernization in the higher education system dictates its own rules for its implementation. Fundamental changes are taking place both in the internal and external environment of universities and for university activities. However, the nature of modern changes requires a new look at the university model, a change in its paradigm, and not just the addition of its structure to an incubator for technological entrepreneurs. There are contradictions.

On the one hand, universities are adapting to new trends by creating a new faculty to develop a promising scientific project. On the other hand, there is a need to create an entirely new university, the so-called "third-generation university," which involves the formation of a new understanding of how to manage professional services firms, a variety of which are universities. These are the universities of the future. Therefore, the adaptation of the ideas of sustainable development to the educational process in the university through the program material of the taught disciplines will make it possible to develop integration from three sides: economic, social, environmental.

According to the psychological dictionary, integration is the creation of internal unity, cohesion, which is expressed in the identification of collective, the cohesion of a group as its value-oriented unity, objectivity in assigning and accepting responsibility for successes and failures in joint activities [11]. In pedagogy, this is nothing but a process, as well as the result of the interaction of various elements. In pedagogy, the principle of integration can be considered in two aspects. Firstly, it is a state characterized by coherence, orderliness, and stability of relations between various elements. Secondly, this is the process that leads to this condition. Besides, integration in pedagogy is a very important indicator of the effectiveness of the entire education system, since it serves as a criterion for its integrity [11].
Only a teacher can create, based on personal and joint experience, reflective-evaluative, and environmental-project activities focused on the values of sustainable development (VSD). The teacher has always been and is a central figure in education. Modernization of education cannot occur if teachers do not strive to improve their professional activities.

The goal is to show some features of the managerial activity of the teacher in integrating the ideas of sustainable development into the educational process at the university through the program material of the taught disciplines. What is necessary for forming the image of a teacher as an effective manager for managing the process of education, training, teaching students in the transition period to the third-generation university.

A person’s belonging to a particular profession is manifested in the features of his activity and way of thinking. According to the classification proposed by E. A. Klimov, the pedagogical profession belongs to the group of professions, the subject of which is another person. But the pedagogical profession is distinguished from a number of others, first of all, by way of thinking of its representatives, an increased sense of duty and responsibility. In this regard, the pedagogical profession stands apart, standing out in a separate group.

Its main difference from other professions, such as "human-human" is that it refers to both the class of transforming and the class of managing professions at the same time. The teacher has the formation and transformation of personality as the goal of his/her activities. Therefore, the teacher is called upon to manage the process of intellectual, emotional, and physical development of the individual, the formation of his/her spiritual world. The teacher, like any other leader, should be well aware and represent the activities of students, the development process of which he/her supervises. Thus, the teaching profession requires double training focused on human relationships and specialized knowledge in the sciences [13].

2. Materials and Methods

Modernization of higher education cannot occur if teachers do not seek to improve their professional activities. The teacher lacks understanding of education management. A growing awareness of this fact is the basis of interest in management, that is, in managing the integration process and leadership in order to become an effective manager.

In the 21st century, as recognized by the international community, education for sustainable development (ESD) becomes the backbone of the global educational process [12] ESD is not a separate subject, but the focus of all education. Education for Sustainable Development (ESD) is of a general cultural nature, integrates the natural sciences, socio-humanitarian, informational, and technological aspects of the design of the human activity and its assessment. ESD provides an understanding of the laws of harmonious, compatible development of Nature and Society (environmental imperatives); generates personal meanings of a sustainable lifestyle and universal moral imperatives (global citizenship) [1; 5].

The following reasons led to the need for a significant update of the foundations of designing domestic environmental education: ongoing socio-economic transformations, the construction of a civil legal state, and the modernization of the education system reflecting these processes, development of documents of a new generation of the State standard of higher education, the formation of an international education policy for sustainable development [7].

In accordance with the outcome document of the UN Rio + 20 Conference "The Future We Want" and the Global Action Program on Education for Sustainable Development launched by the Aichi-Nagoya Declaration (2014), which acted as a catalyst for the activities of all countries in the field of ESD, the task is to improve and reorient all education to the goals of SD. Moreover, the development of ESD is not breadth (about SD) but in-depth (for SD), "launching and building up activities at all levels and in all areas of education and training in order to accelerate progress towards sustainable development" [8, 3, 9, 5].

Sustainable development cannot be achieved solely through technology, political regulation, or financial mechanisms. Humanity needs to change its mindset and behavior. For this, in turn, it is necessary to provide quality education and training for sustainable development at all levels and regardless of social conditions. [12].

In the Russian context, the adaptation of the United Nations Sustainable Development Goals (UN SDGs) is appropriate at the regulatory and programmatic levels. Scientific, methodological, informational, financial
support for SDG adaptation is important. In the future, it would be essential to see the SDGs of the country and regions as an integral part of the country's strategy, but at the same time "consistent" with both the parameters of economic growth and the nature of long-term politics, as well as with the position of civil society [6]. All this will make it possible to outline the paths of an integrated educational process at a university aimed at pedagogical activity based on the ideas of sustainable development and lay in it the potential of technology and activity approaches to unleash the potential of students in the future for opening new directions. The integrated activity of the teacher, based on the adaptation of these ideas to the educational system in the university on the basis of management, will contribute to improving the quality of education of this university and the accumulation of experience in the transition to the so-called "third generation university."

A short version of the report, prepared by experts of the Analytical Center under the Government of the Russian Federation, makes it possible to assess in a capacious, transparent, and accessible form the benefits and prospects that open "17 UN Sustainable Development Goals" for the future of our country. In particular, it would be possible to assess the benefits and prospects that open these goals for the teacher and student and for all of us. We look at these world goals through the eyes of an ordinary person who cares about the welfare of his family, the opportunity to find a decent job, get a quality education and qualified medical care in a modern, well-equipped clinic or hospital, and preserve the beauty of nature. After all, it is these simple, but essential things for all of us that will become available if the goals of sustainable development proposed by the UN are realized [6].

The uneven development of the Russian economy and society over the past twenty-five years allows us to think about what goals it is realistic to set for itself, for example, until 2030, in accordance with the UN-defined period. In the absence of a significant long-term socio-economic strategy, Russia has to talk about specific guidelines that could become an essential element of the national discussion about the future of the country. The UN SDG concept provides an excellent opportunity for a systematic attempt to adapt global goals to Russian conditions. Only the manager-teacher will help to implement this concept in the education system.

3. Results and Discussion

In the era of second-generation universities, research was mostly mono-disciplinary. Currently, the vast majority of scientists work in multidisciplinary teams focusing on specific areas of study. These changes also apply to the leadership of a modern university, which should create new positions for managing the processes of benefiting from know-how, be useful in the face of increasing scale and complexity of the tasks facing the university [2]. To address issues related to changes in the forms of organization of science, the teacher plays an essential role in adapting the ideas of sustainable development to the disciplines studied at the university. The activity of the teacher also plays a significant role in obtaining an integrated process in which not only different aspects of one issue will be involved in one discipline, but various sciences will be focus in a specific field of study. This will allow expanding scientific student projects in the framework of program material and will help them to go beyond the limits of one studied discipline.

Speaking about the teacher as a manager at the university, the organizer of his educational process, one must first consider what he/she encounters in the process of his/her activities. In his daily work, the teacher is called upon to solve very important and complex organizational, managerial and educational tasks that require him to have a high level of available knowledge, skills, and abilities of analytical and reflective, projective and prognostic, organizational, technological and administrative nature. Departure from the traditional authoritarian-imperative style of managing a team of pupils and focusing on truly humanistic thinking is an indispensable condition for the teacher to transition from the level of a simple manager to a qualitatively different level of pedagogical profile manager [10].

The teacher-manager is aware of their own social significance in organizing the process of managing students' activities. This has a beneficial effect on increasing not only personal self-esteem but also contributes to the enthusiasm of students for their activities, the emergence of professional enthusiasm. The teacher-manager is able to create such a learning environment for students, where an emotionally comfortable space of social interaction will be created for the full development of a wide variety of forms, types of human activity, with the best results and lowest costs. The formation of personality, its self-determination, building a living space begins precisely with such an interaction between a teacher and a student. In such an atmosphere, the student will be much more willing and productive to participate in innovative projects organized by the teacher. The student’s work with the teacher-manager will make it possible to gain experience in the personal-value
attitude to the world and productive social cooperation. This is important to develop now since the transition to the so-called model of the "third-generation university" implies a completely different nature of the forms of organization of science, the activities of the teacher and student, the goals of training and education.

The commonality of the tasks set by the standard for educational subjects included in a single subject area, their focus on the general cultural preparation of the graduate, the design of a system-activity approach on an everyday methodological basis creates the necessary legal grounds for their integration [4].

Management begins with the organization of interacting with people who want to engage in product management. To a large extent, the time and effort required to introduce new ideas and new ways of learning into the educational process depend on the willingness and ability of teachers to change their activities, mastering innovations, and becoming an innovative teacher. Therefore, the first step in the development of integrated education based on the ideas of sustainable development is motivational; the second is self-determination; third - design, associated with the development of a program of activities; the fourth is analytical, suggesting a reflection of the integration already implemented; the fifth is the introduction of results into the practice of a teacher based on management.

Based on the Aichi-Nagoya Declaration on Education for Sustainable Development and the main stages of the integrated teacher process, built based on the process model, then it is possible to formulate some aspects to which attention should be paid in managing such activities [1, 9].

In the ESD aspect, these aspects are as follows:

1) To study 17 global goals of sustainable development, which are formulated in documents and identify specific goals that can be entered into the content of the studied discipline;

2) To ensure the development, support, and implementation of measures in the ESD aspect in the process of integrated activities aimed at adapting the ideas of sustainable development and the content of the studied discipline. Events can include both individual events for a group of students studying in a particular discipline, and events that attract all interested parties, in particular, ministries of education and any other ministries involved in ESD activities, higher education institutions, as well as scientific and other knowledge communities. Participate in collaborative, transformative efforts to produce, disseminate, and use knowledge and to promote innovation through an intersectoral and interdisciplinary approach to the interaction of science, policy, and practice in the field of ESD. This is to facilitate decision-making and capacity-building for sustainable development, with particular emphasis on the involvement and consideration of youth as a key player.

3) To create platforms for the dissemination of ideas and best practices for sharing (including platforms based on information and communication technologies).

4) To improve monitoring and evaluation methods in the five priority areas of the global program of action based on mutually beneficial coordination of efforts [1].

In the aspect of an integrated management-based process, attention should be paid to the following aspects:

1) To identify and classify the processes of the integrated activity of the teacher, determining the interaction of the integration elements and their design;

2) To identify a teacher who wants to innovate for the implementation of an integrated managed process in the aspect of education for sustainable development;

3) To describe the process of integrated activity of the teacher to implement the adaptation of educational ideas for sustainable development in his/her subject.

4) Define the criteria of effectiveness and efficiency for managing the integrated process when introducing the ideas of sustainable development into the studied material of the taught discipline [9].

4. Conclusion

An innovative teacher, a manager-teacher, and education play an important role in promoting the ideas of sustainable development, as in recent years, progress in the human community has been a priority. Education for sustainable development is a picture of the design of the future. The teacher’s work with students and future
professionals is a contribution to building this future. Adapting the ideas of sustainable development to the educational process in the university through the program material of the taught disciplines will outline the ways of commercializing the know-how that will be developed within the university. And they will help to formulate the third goal in the university during the transition to the university of the third generation in addition to the goals of the development of scientific research and education.

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