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**UNIVERSAL STRUCTURAL-FUNCTIONAL MODEL OF LEARNING
THE BASICS OF SAVING RESOURCES AND ENERGY OF THE FUTURE
ENGINEERS AND EDUCATORS**

Currently, one of the main tasks of contemporary issues in all spheres of the economy is the issue of energy and resources, is to improve the efficient use of energy resources, fuel economy, the substitution of scarce and expensive energy resources and energy available and affordable.

Effective solution to any problem is based on two main factors providing: information and personnel support. This task requires the preparation of highly qualified teachers for the teaching of these courses.

The aim of this work is to systematize generalizations development based on previous studies of the universal structural and functional model of training, which would enable teachers to efficiently and effectively implement a form didactic teaching aids engineers-teachers of different profiles subject "Fundamentals of saving resources and energy ".

The block diagram of the relationship of species loss of energy (mechanical, hydro and gas-dynamic, electrical and thermal) with the basic elements of universal processes is shown. The block diagram of the relationship of the main industrial profiles training of engineers and educators and types of energy losses that occur in the processes of these industries is shown.

The main profiles engineer-teachers are the following: energy, metals, machinery, transport, welding engineering, oil and gas business, chemical engineering, construction, electrical engineering and electrical engineering, manufacturing technology and processing of agricultural and food products, housing and communal services and consumer services.

Integrated universal structural-functional model of training engineers and educators of all profiles on the subject "Fundamentals of energy and resources" is based on a combination of block diagrams. This model allows us to construct a rational structure of the course and effective teaching methods, systematizing and minimizing energy losses and the variety of technical measures to reduce them in a variety of industrial processes and sectors of economic activity. Model allows us to systematically and coherently build the learning process, moving from the study of types of energy loss in the physical processes to the concretization of these processes and the loss of basic universal elements of technological processes, and further to the study of effective science and technology solutions to provide energy and resources in complex production processes of economic activities, the respective profiles of training future engineers and educators.