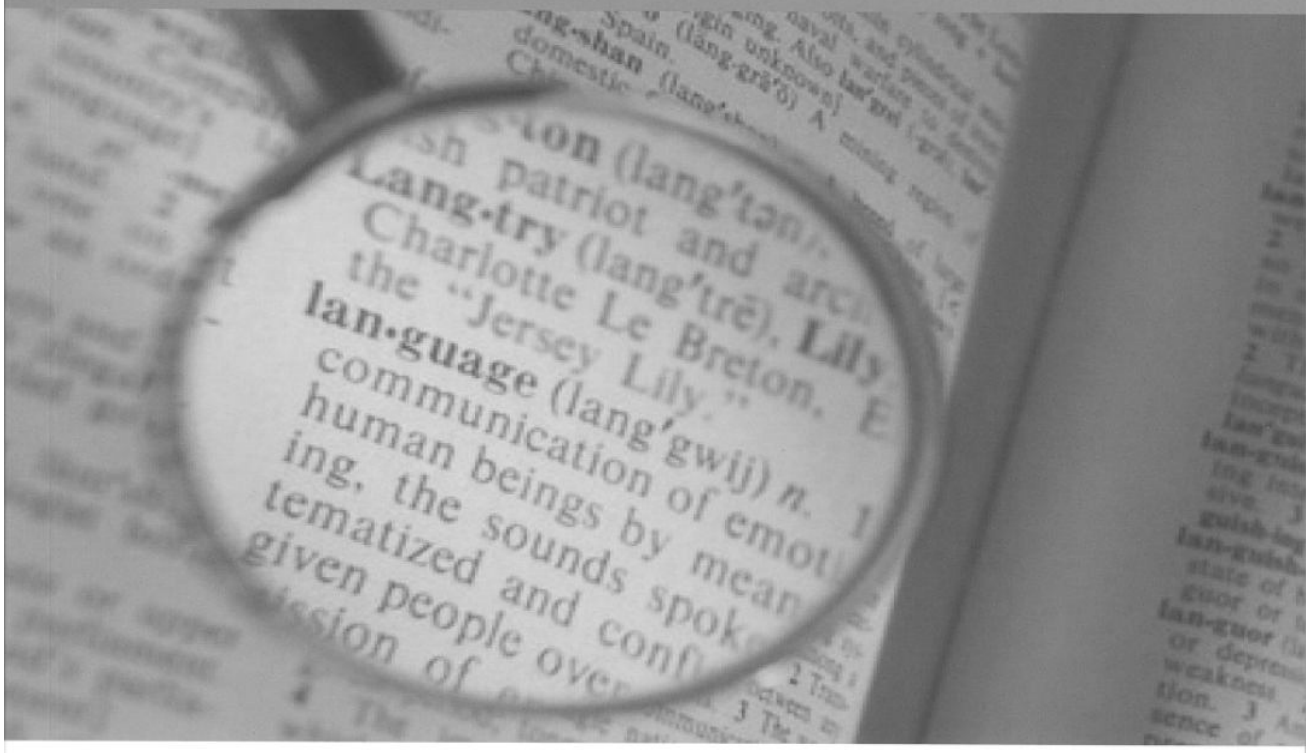
Studies on Science and Culture



Higher Linguistic Education from the Perspective of Reforms:

New Approaches, Prospects, and Challenges

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Editors

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Armenian Perspectives on International Collaboration in Science, Higher Technology, and Innovation

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ABSTRACT

The present report aims at highlighting major activities carried out on the part of the State Committee of Science (SCS) of the Republic of Armenia (RA) Ministry of Education and Science. Particularly, this paper shall dwell upon the measures taken with a view to regulating the statutory-legal base, the on-going programmes on science funding, activities directed at supporting young scientists as well as at expanding international collaboration. The authors have also outlined the main directions of SCS policy for the coming years, with an emphasis on those initiatives aimed at realizing long-term investment projects, which will lead to the expansion of the collaboration with the Russian Federation and other CIS countries.

INTRODUCTION

Armenia's *State Committee of Science* (SCS) was established on October 1, 2007, by Decision no. 231, of the President of the Republic of Armenia.

The ultimate objectives and tasks set before the SCS are listed below.

- Improvement of the structure of scientific and technical potential of the Republic and establishment of a productive system of scientific staff training.
- Support the development of the science sector, as a prerequisite of providing for the state security, nation's economic, educational, and cultural development.
- Elaboration and implementation of the scientific and technical policy.
- Participation in the elaboration of the innovation policy.

Since its establishment, SCS has elaborated several important statutory-legal documents, which are already adopted by the Armenian Government. They run as follows:

- *The Order, Criteria, and Principles of Establishing Scientific Centres*
- *The Principles and Criteria of Setting Priorities of Scientific and Technical Development in the Republic of Armenia (RA)*

Several worth mentioning measures have been undertaken in the sphere of information technologies, among which we can state the successful realization of the Armenian National GRID Initiative.

As far as innovation and advanced technologies are concerned, then it should be stated that, in 2011, three innovation projects are to be launched, with the overall budget of USD 1.5 million). The co-funding of projects will involve the private sector.

PRIORITIES OF SCIENTIFIC AND TECHNICAL DEVELOPMENT IN THE REPUBLIC OF ARMENIA (2010-2014)

The development of science is closely connected with the progressive developments in the modern world. It is due to the latter that SCS has taken a keen interest in creating an atmosphere which will make it possible for our Republic to share the highest ranking positions in acquiring and applying knowledge alongside the developed countries. The creative and dynamic society of the 21st Century imposes its priorities. With this aim in view, we have set the following list of priorities for the coming five years:

- Armenology, Social – Economic Sciences, the Humanities
- Life Sciences
- New Sources of Energy, Renewable Energy
- Advanced Technologies, Information Technologies
- Earth and Space Studies, Rational Nature Utilization
- Basic Sciences for Key Applied Research

STRATEGY ON ENHANCING SCIENTIFIC AND TECHNICAL COOPERATION WITH THE RUSSIAN FEDERATION AND CIS COUNTRIES

The ultimate objective of the Strategy consists in establishing the synergy of education, science, technology, and innovation.

The steps to be taken in this direction include:

- creation of a favourable economic environment for scientific organizations, including cultivation of mechanisms ensuring concessional loans;
- establishment of commercialization systems and deployment of research results;

- establishment of innovation centres on the basis of state and non-state institutions;
- reorganization of several scientific institutions involved in applied research into innovative ones;
- support the establishment of venture foundations and mechanisms of insuring innovation risks;
- promoting the role of the state in licensing and patenting research results.

INNOVATIVE COOPERATION WITH CIS AND EUROPEAN COUNTRIES

The Republic of Armenia submitted for approval about 40 project-proposals – in nanotechnologies, life sciences, ecology and rational nature management, information and telecommunication technologies, aviation and space technologies, training of scientific personnel – within the framework of the Interstate Target Programme on Innovative Cooperation between CIS countries for the period up to 2020.

Among them, the following project-proposals are worth mentioning:

- Cultivation of technologies for cavitation-induced conversion of graphite into diamond;
- Development of a portable optical biosensor of a new type, for investigating nano-bio-systems and ecological control of the environment;
- New brain hormone against neurodegenerative diseases, particularly Alzheimer's disease.

The following proposals have been submitted as a main approach to cultivating tech-job proposals of the Interstate Target Programme on Innovative Cooperation between CIS states, for the years up to 2020:

- Creation of a united information field with the application of up-to-date infrastructure (GRID net);
- Establishment of venture foundations, which are among the most productive instruments of funding and commercializing technical elaborations and technologies (combining state and private sectors);
- Development and application of an interstate database on independent experts, as well as specialized expertise organizations; implementation of an independent system of scientific-innovation expertise;

- Development of productive mechanisms for funding and co-funding joint programmes, by national and international investment foundations as well as by providing long-term concessionary crediting;
- Collaborative cultivation of target manuals, with a view to providing a system of training and retraining scientific personnel in the fields of innovative industry, including adapted material for on-line training.

CONCLUSION

Today, more than ever, we are in need of science. In the modern world, where knowledge develops and transforms at a rapid pace, the support of R&D projects and their implementation in the country's economy has acquired a deeper significance. In the 21st Century, the development of a creative medium and its introduction into the society will represent the major incentives for the nation's sustainable development. The establishment of a coherent system of education, science, economy, and innovation will be the most reliable precondition ensuring economic growth.