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**SECONDARY VOCATIONAL EDUCATION REFORM
IN THE REPUBLIC OF MOLDOVA**

A MATTER OF CURRENT INTEREST

The administrative-territorial reform began in Moldova in November 1998. The new country structure consists of 10 judets, Gagauzia administrative-territorial unit and the territory of the self proclaimed separatist Moldovan Transnistrian Republic that used to be part of Dubasari judet. According to the reform principles, central Government responsibilities were partly transferred to judets' executive committees. In particular, functions related to the organization and governance of secondary vocational education have been delegated to local governments. At present, the Ministry of Education is working on a set of normative documents providing the transfer of all 1st and 2nd level polyvalent vocational and apprentice schools' financial management from the central Government to local governments. Local authorities will be responsible for the training of qualified specialists to meet the demand of the local labor market.

A special role in carrying out this task is played by the secondary vocational education establishments, which will constitute the basis for the creation of judets' education and vocational training systems. These institutions may be subject to some changes related to their transfer to the judets' financial management. Given the fact that the previous enrollment plans for secondary vocational institutions were made taking into account the needs of the entire Republic, the educational and vocational training process being financed from the state budget, the number of occupations taught there was small and the institutions' profile - narrow. Once the financing is made from judets' budgets, it can be expected that vocational education and training institutions firstly address local needs. In this context the author of the study will list all the occupations taught at the secondary vocational institutions in Edinet judet and will analyze the situation from the point of view of the local needs.

Also, in this study the author intends to give a description of the secondary vocational education reform in Moldova, the collaboration with different international bodies, as well as the institutional framework for vocational education and training at judet level (case study in Edinet judet). Special attention will be given to the contingent enrolled in the educational process, to the situation of the teaching staff and foremen in terms of practical training, provision of technical and material resources to institutions, etc. It is possible that certain institutions will be consolidated by local governments, thus it is important that there be a clear image of each institution's existing potential. Moreover, it is planned that some institutions are going to be involved to a greater extent in the process of developing standards for vocational education and training, and respectively the institutions' experience in this field will be studied.

Reform of Secondary Vocational Education System

At present, the secondary vocational education reform has encountered many difficulties caused by economic and managerial blockages. However, the Ministry of Education makes considerable efforts to avoid the reversal of the secondary vocational education reform. As a result, most provisions of the Concept on Education Development, of the Education Law, as well as those of other legislative and normative acts have been enforced.

Based on the Education Law provisions, the pilot and implementation stages of the new institutional structure have been established. Thus, in 1995-1997 the first level of the polyvalent vocational school (PVS) was introduced as an experiment in four units and starting with September 1, 1997 it was implemented in 52 schools (Government Decision no. 795, dated 20.08.97). At the same time, the apprentice schools network was determined and PVS apprentice groups were legitimated. During 1997-1999 the second level was introduced as an experiment and was implemented starting with 2000-2001 school year (35 first level PVS became first and second levels PVS, Government Decision no.807 of 08.09.2000).

At the same time, vocational school no.1 from Chisinau municipality, which has the status of 1-2 levels polyvalent vocational school, during the last three years has introduced the third level as well. Today apprentice school no. 1 from Chisinau has finished experimenting post lyceum polyvalent vocational education.

At present there are operating 27 first level PVS, 35 level 1-2 PVS, one level 1-3 PVS and 18 apprentice schools with the following student contingent: first level – 9321 students, second level – 2547 students, third level – 50 students, apprentice schools and apprentice groups – 8973 students. Thus, all the provisions of the Concept on Education Development and of the Education Law concerning new secondary vocational institutions are carried out.

In compliance with the provisions of the “State Program on Education Development for 1999-2005”, the development of standards is envisaged for the period 1999-2005, the necessary financial resources for 1995 being estimated at about 1.5 million lei. Although no budgetary resources from the state budget have been allocated for this purpose, the main standards’ components have been developed. 21 republican methodological committees were formed and approved by the Ministry’s order. They developed standard plans for all occupations taking into account the experimental plans previously approved by the Collegium’s decision.

The Guide and the Model-Handbook for curriculum development, the Handbook for teacher training and the Guide for certification and assessment of secondary vocational education have been developed within the framework of the TACIS project. All these materials have been made available to schools and are being used for the development of curricula and syllabi.

In the future the process of development of standards for vocational education training will be continued by establishing specialized structures within higher educational establishments in this field. In this context, it is also necessary to develop the Nomenclature of occupations and trades for all secondary vocational education levels. However, it should be mentioned that the absence of an adequate financial insurance makes difficult the completion of these activities within the deadline established by the “State Program on Education Development for 1999-2005”.

Before the reforms were launched, subjects were taught in Russian in all secondary vocational education institutions. There have been undertaken measures which permitted the provision of training in Romanian for all occupations. With a view to this, 5 titles of textbooks were developed and published (“Garment Technology”, “Principles of Agronomy”, “Growing Vegetables in Farmer’s Household” “Microbiology” “Food Sanitation and Hygiene”, “Metals’ Processing through Splintering”), 17 titles from the electrotechnical, electronic, technical and industrial fields were translated from the Russian language. Over 30 titles of textbooks (services, processing industry, public food supply, agriculture) have been published in Romanian and are recommended for use in the process of study.

The Ministry has taken measures with a view to the retraining of teaching staff and executives. A series of courses have been organized for headmasters of vocational schools and their deputies on the topic “Issues concerning vocational education management”.

For all executives from educational institutions seminars and conferences have been held within vocational centers in Germany (Magdeburg, Schwerin, Rostok, Hamburg, Manheim). Refresher courses for teaching staff were held within the Institute of Educational Sciences and universities in the field. During the past three years within the German Foundation for International Development, seminars of practical training are held for teachers of major subjects and foremen on permanent basis for different domains (constructions, metal processing, food industry, agriculture etc.).

In order to adjust the system to the territorial-administrative reform and to the tendencies of economic development was launched the process of decentralizing vocational training and aligning institutions to the local economy needs. Thus, by Government decision, 8 institutions in all from Ungheni and Lapusna judets became subordinated to the local public authorities. The Ministry of Education collaborates with the Judets Councils in terms of readjustment, alignment of institutions to the needs of local economy and subordination of other institutions to judets.

The material resources and technical equipment of schools have been supplemented even before the beginning of reforms. The National Program on Education Development for 1995-2005 of the Republic of Moldova envisaged the creation of 1200 additional study places, the supply of new basic equipment for training, agricultural equipment, transport, school furniture and other material resources, but these provisions have not been carried out due to the lack of financial support. However, during the last ten years almost each school accumulated additional material resources and equipment for 2-3 occupations by means of exchanges, transfers and use of extra-budgetary funds. Consequently, schools

became multi-profile, which allows them to address more efficiently the demand of the local labor market.

To consolidate technical and material resources, the Ministry together with educational institutions, some enterprises and technical assistance projects has readjusted and re-equipped several schools. The technical and material resources of polyvalent vocational school no. 7 from Chisinau were readjusted in view of training workers for plumber and tiler occupations in accordance with the European standards; the respective curriculum was also developed. In the polyvalent vocational school from Carpineni, Lapusna judet the technical and material resources have also been readjusted in order to train and prepare workers qualified in processing agricultural produce (millers, bakers, food stuff salesmen). A mill and a bakery were built for training and production purposes.

With material support from Germany, PVS no 5 from Balti and Riscani are supplied with German technical equipment for training motor mechanics in view of servicing the car park increasingly renewed with foreign vehicles.

Since September 1, 2001 the admittance of students to this school is based on contracts concluded between the student, the enterprise and the school. New forms of collaboration are established between joint venture enterprises and vocational schools. Thus, Rezina polyvalent vocational school based on the contract with Calmo Italian firm provides vocational training to tailors. Polyvalent vocational school no. 3 from Balti and "Steilman" Moldo-German firm have recently introduced vocational education and training based on the German system (dual education) for dress-making occupations. In the above-mentioned schools expenditures on vocational training are incurred by the joint ventures.

Upon order of the Department for Labor Use of the Ministry of Labor and Social Protection, the material, technical and teaching resources of polyvalent vocational schools and apprentice schools are also used for vocational training, for retraining of unemployed and laid off persons.

International collaboration in the field of secondary vocational education reform

"The Reform of the Vocational Education and Training System in Moldova" TACIS project was implemented in 1998-2000. During its implementation the project was monitored on quarterly basis by the European Foundation Commission on Education. At the same time, the project was supervised by a joint Coordinating Board consisting of representatives from the Ministry of Education, the Ministry of Finance, the Ministry of Economy, the Ministry of Labor and Social Protection. Three task groups and several working groups were established within the project. All these groups worked in their fields and were monitored by foreign experts. The main directions were the following:

1. Policy, strategy and financing:

- the Green Charter was developed, as well as recommendations for policy and strategy in the area of vocational education and training,
- recommendations on the financing strategy;

- the draft Law on secondary vocational education .
2. Analysis and forecast of occupational and training needs:
 - a study of Chisinau and Hincesti enterprises operating in four different sectors was conducted; subsequently another study of the food industry sector in Edinet and Chisinau was made;
 - guides for the system of short and medium term analysis and forecast of occupational and training needs were developed and approved;
 - recommendations on the organizational structure of local, regional and national stakeholders' forums.
 3. Curriculum development and teacher training. Guides for curriculum development, teacher training, certification and assessment were developed:
 - curricula were developed and tested for four occupations;
 - the necessary equipment for these occupations was delivered and installed in two pilot-schools;
 - the organizational structure of the Center for teacher training and curriculum development was approved within the Moldovan Technical University.

Bilateral cooperation and collaboration agreements with similar institutions in Romania were signed under the project.

At the project's summing up conference participated representatives of the Government, line ministries, trade unions, employers' association, foreign donors (UNDP, UNESCO, SOROS, World Bank), as well as representatives of the European Training Foundation (ETF), the results of the project and the implementation recommendations being highly appreciated.

In line with the decision of the republican Commission for selection of staff for retraining abroad, the main Secondary Vocational Education Directorate of the Ministry of Education has been collaborating for the past seven years with the German Foundation for International Development (DSF) within the framework of the strategy of vocational training restructuring towards market economy and within the market economy during the transition period.

The agenda of many seminars (four seminars yearly, out of which two in Germany and two in the Republic of Moldova) included the familiarization of teaching staff and executives from the secondary vocational training system with the following main objectives:

- the structure of the vocational training system in Germany and other countries;
- different specific objectives of the employers' and employees' representatives;
- development of the labor market and its consequences on the vocational training.
- the Federal Institute for Vocational Training (BIBB) and its tasks;
- the tasks and peculiarities of vocational schools and vocational education and training centers;
- occupations' Nomenclature and its orientation towards vocational education and training;

- the development of vocational education and training standards;
- the management of vocational education and training;
- the organization of private enterprises etc.

This program has been implemented and continues to be fully implemented in a number of German cities, where there were visited and studied centers of vocational education and training, vocational schools, scientific research institutions in the field of vocational training, vocational pedagogical institutes (Schwerin and Magdeburg), chambers of industry and commerce, crafts chambers etc.

Information on the German fundamental principles of vocational education acquired during seminars, study trips and practical training of teachers and foremen in enterprises can be accounted for by the following findings.

The high quality of German products recognized on the World market, as well as the competitiveness of craftsmen and industries, according to German specialists, became possible due to the high level of vocational training and the professionalism of specialists at all levels.

In other words, qualified specialists represent a prerequisite for market economy efficiency. The quality and efficiency of vocational training and retraining activities determine a country's performances.

All these constitute the result of numerous factors, the importance of which to a great extent pertains to the vocational education system, which is a component of the educational system in Germany.

In Germany the training of workers is carried out based on the dual education system with vocational training in two places:

I. Enterprises (about 50 thousand manufacturing and handicraft enterprises).

II. Vocational schools (around 3 thousand vocational schools), where study approximately 40% of graduates of grade 9(10) of comprehensive schools and gymnasiums.

In Germany secondary vocational training based on the dual system is an essential component of the educational system. This is determined by Germany's social and economic infrastructure. The dual system has developed naturally during a long period of time. Historically, this form of vocational education is directly linked to the activity of:

- handicraftsmen;
- agricultural workers;
- tradesmen.
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Vocational training in enterprises and vocational schools is regulated by federal and regional legislative acts. According to the German legislation, any young person that graduated from grade 9(10) and does not continue his/ her studies is obligated to learn a trade. For this purpose he/she concludes a contract with an enterprise which can provide practical training in the chosen occupation after which he becomes an apprentice. At the same time, he or she is obligated to enroll in a vocational the all-round education level of students.

All-round education covers about 40% of the curriculum while special education covers about 60% of it. The minimum duration of studies is three years. The learning process occurs in the form of short week (3-4 days at the apprenticeship enterprise and 1-2 days at the vocational school) or as compact training. Besides large enterprises, there can be private vocational schools that are self-financed. After a three-year activity, a special committee attests the educational establishment and if it meets the standard requirements approved by the state, it can be supported by the state budget.

According to the state legislation, enterprises are not obligated to provide apprentice positions, however if they take an interest in this, they are tax exempt and the state stimulates them by covering some expenses (3-5 thousand DM per apprentice). Consequently, enterprises are motivated in offering apprentice positions and closing contracts with teenagers. At the same time, there are certain requirements for enterprises providing apprentice positions:

- vocational training of the youth under 18 should be carried out in one of the 380 established occupations;
- availability of foremen having the right to teach;
- developing syllabi according to vocational training requirements in the respective occupation;
- confirmation by the chamber of industry and commerce of the enterprise's capacity to provide training positions.

Around 380 occupations established in Germany, selected from 13 vocational fields are at the disposal of the youth. The only criterion for determining the number of apprentice positions is the number of applications which is not planned by anyone. Young people choose by themselves the place of training. Based on the chosen occupation during their studies, apprentice students receive scholarships from enterprises in the amount of 500-1500 DM (the scholarship is more substantial for occupations needed by the state, for instance for hairdressers the scholarship is 500 DM, for motor mechanics – 680 DM and for occupations in the constructions field – 1300-1500 DM). In cases where enterprises have no possibility to provide apprentice positions or when these positions do not allow full coverage of the training curricula, there are organized “external training centers”, supported by public communities, chambers, unions, associations, etc.

The federal government offers incentives to the centers if they follow the objectives of the vocational training policy:

- maintaining a high level of practical training;
- ensuring the diversity principle in providing training positions;
- supplementing and improving practical skills acquired at enterprises;
- creating new training positions;
- stimulating vocational retraining.

The above-mentioned centers are fully equipped with all that is necessary for providing practical training at high quality level.

The quality and efficiency of vocational training depends mainly on the level of contents and methods of training. At present in Germany 18 scientific institutions deal with the evaluation of the vocational training system, contents, syllabi, etc.

For example, the Federal Vocational Training Institute (BIBB) is responsible for:

- advising the federal government on vocational training issues;
- scientific research in the field of vocational training;
- identifying established occupations and developing curricula;
- developing new vocational training methods;
- developing teaching materials;
- developing different regulations and normative acts on teaching and methodological issues, etc.

The requirements towards vocational school teachers are the following:

- higher education diploma allowing to teach the respective subjects;
- their training occurs during 8 semesters and is completed with a final examination;
- after 2-3 years of teaching they can be appointed as civil servants for life.

An important role in the assessment of the quality of vocational training play the chambers of industry, commerce and crafts, which defend enterprises' interests (the employers). Under the law, each manufacturing or handicraft enterprise has to be member of the regional chamber.

The chambers' main functions are the following:

- evaluation of enterprises' capacity of providing apprentice positions;
- organizing and taking intermediate and graduation examinations (vocational schools have no right to assess);
- providing refresher courses.

In a different connection, it should be mentioned that during the last three years the main Directorate for Secondary Vocational Education has been collaborating with the Swedish Foundation for Vocational Training of adults and laid off persons. A small project was implemented in Causeni polyvalent vocational school. It dealt with the development of about 36 modules of vocational training for adults in the construction field. At the beginning of this year the project was extended to include the development of modules for more occupations (metal processing, food industry, computer operators).

The developed modules are used during the practical training of adults and laid off persons together with the Department of Labor Use of the Ministry of Labor and Social and Family Protection, there were established 17 polyvalent vocational and apprentice schools, where adults are trained at the order of this Department by concluding the respective contracts with financial support.

However, at the initial stage of the reform it was found out that certain aspects related to the reform of secondary vocational education provided by the Concept and the Education Law require amendments. In 1996 the Institute of Pedagogical and Psychological

Sciences proposed for the examination of the Ministry's Collegium a New Concept on secondary vocational training, which was approved, but as it did not comply with the effective legislation, it could not be implemented.

Seminars and conferences were held with the chiefs of educational directorates, headmasters of secondary vocational training institutions, college principals, representatives of the Technical University, the Agrarian University, the Academy of Economic Studies and others in order to find solutions.

Conclusions and recommendations

In the process of reforming secondary vocational education system, a series of hindrances was traced out. If these obstacles are not overcome, this can have a negative impact on the reforms in all national economy sectors.

1. Polyvalent vocational education envisages two parallel standards: theoretical lyceum education and vocational education. *Experience has shown that the majority of students are not able to meet these two parallel standards. Out of the total number of those admitted to polyvalent vocational schools (740 in 1996) only 227(30%) complete level II, while only 15% percent receive a Baccalaureate diploma. As a result, this has led to the sudden decrease in the number of students, which together with vocational studies have to finish the all-round education program. At the same time, according to the Occupational Classifier of the Republic of Moldova, 85% of occupations require specifically this level. Also, the excessively long duration of studies discourages students to follow this track.*
2. The contents of theoretical lyceum education does not correspond to the characteristic features of vocational training.
3. Competition based admittance into polyvalent vocational schools like in theoretical lyceums leads to the limitation of access to this educational area for gymnasium graduates.
4. Upon completion of levels, due to the overloaded curricula many students do not meet the vocational skills and abilities standards.
5. If the provisions of the law are enforced in order to organize the training of third level technicians in polyvalent vocational schools, it will be necessary to accumulate the appropriate material resources to retrain the personnel, which will require significant additional expenditures. Colleges that have sufficient material resources, teaching staff and experience do not make full use of these possibilities in this connection. Polyvalent vocational schools that do not have experience in the field, material resources or trained staff cannot train specialists of this level either. The Occupational Nomenclature of third level colleges and polyvalent vocational schools should be examined to establish single standards and to identify the institutions that will provide training at this level.

6. According to the provisions of the Education Law, attaining the technician level for lyceums and comprehensive schools graduates is possible only in one way – by completing level I and II studies at polyvalent vocational schools, *which discourages this category of graduates to choose this area.*
7. As to apprentice schools, *according to the Concept on Education Development and the Education Law, it mainly targets 1-1.5 year training in simple occupations for narrow conveyer activities, which cannot be considered secondary vocational education, but vocational training for a limited number of simple occupations.*
8. The career guidance system has deteriorated. There is no necessary data related to the labor market and no system of ongoing vocational education.
9. Out of the four essential components of secondary vocational education – general education, theoretical vocational training, practical training and production practice – only the first two fall under the responsibility of the Ministry of Education, *while the others fall under the responsibility of economic agents which ensures a direct connection to the actual requirements of the labor market. To acquire a high level of professionalism during practical training, one needs equipment and facilities that are not available to schools. Although the Education Law provides for the participation of economic agents in the organization of practical training and production practice, these provisions are not enforced, all the responsibilities being devolved on educational institutions, which have neither finances, nor modern material resources.*
10. Human capital, technical and material resources, and the experience acquired by higher educational establishments in the initial preparation of specialists are not efficiently used for teaching staff retraining, which would ensure an ongoing vocational education system. At the same time, these institutions can also ensure the development of vocational education standards.

Taking into account these impediments, the Ministry intervened as early as in 1998 with certain proposals as to the amendment of the Education Law, the proposals being accepted only in 2000.

In line with the amendments and supplements of the Education Law, the following are planned:

- technological lyceums will constitute the all-round education component for polyvalent vocational education;
- the general theoretical basis is acquired by completing level I of polyvalent vocational schools;
- level II polyvalent vocational school training and preparation will occur by means of modular studies, which will contribute to the formation of practical vocational skills, of the self-training basis and the ongoing training basis;

- the duration of studies in polyvalent vocational schools will be reduced by 1-2 years;
- a diversified post-gymnasium lyceum education system will be created, which will increase the access of gymnasium graduates to this level of training;
- access to ongoing vocational education will be expanded;
- it is necessary to develop the Nomenclature based on training levels and occupational families.

Still the Education Law does not specify the responsibilities and competencies of ministries and economic agents, while the Ministry of Education is attributed inappropriate responsibilities and functions, which also constitutes a serious obstacle for the promotion of reforms. In the same connection, it is necessary to pass a law on vocational education and training, which will determine the responsibilities of all participants in the process of specialists' training.

In order to coordinate all activities pertaining to the reform of the secondary vocational education system, adjusted to the constantly changing needs of the labor market and the implementation of amendments and supplements to the Education Law, it is necessary to create a National Board for Career Guidance and Secondary Vocational Education.