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Entrepreneurship and problems of specialists training in Ukraine

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ENTREPRENEURSHIP AND PROBLEMS OF SPECIALISTS TRAINING IN UKRAINE

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In the given report some peculiarities of functioning the Ukrainian system of education during the transitional period to the market economy are considered. Entrepreneurship of the institutes of higher education and small business organizations in Zhitomir region are presented as an example.

Entrepreneurship to our understanding can be defined in a broad way as business activity with the following features:

- initiative, constant search for new opportunities, innovations and non-traditional solutions;
- readiness for reasonable risk;
- flexibility and constant self-evaluation;
- persistence and purposefulness.

Not long ago, the social-economic system we lived in, did not allow us to have a the possibility of entrepreneurship. Now when all restrictions have been lifted, how has Ukrainian society and Ukrainian system of education responded to the situation?

1. Small business enterprises in Zhitomir region

According to the World Bank and International Finance Corporation at present moment in Ukraine:

- private sector share in the Gross National Product is 40-50%;
- 5% of labor force is employed at small private enterprises (20% in Russia, 60-85% in Western Europe);
- 150.000 small enterprises are registered (more than 2 million in Poland).

The majority of state industrial enterprises are in disastrous situation. The main reasons are as follows: crisis of non-payment, absence of variable funds, non competitiveness of production, lack of sale market and others.

The privatization process is slow and painful, it often does not give the expected results.

Let us consider the situation with small business more in details with Zhitomir region as an example.

Zhitomir region is situated in the north of Ukraine on the border with Belarus, its territory is 30.000 sq. km., population is approximately 1,5 mln. The region is rich in mineral resources and forests. The main types of industrial productions are machinebuilding, chemistry, instrument making, food, light and constructional materials. At the end of 1997 there were registered 5.400 small business enterprises but only 1.140 of them are functioning.

Some indicators of small business enterprise activity are presented in table 1.

Table 1. Some Indicators of Small Business Enterprises Activity

Spheres of Economy	Registered small business enterprises	Employed small business enterprises	Average number of employees	Receipts, thousands of grivna
Industry	880	200	3300	15000
Transport and Infrastructure	80	20	200	1300
Construction	650	140	3000	24000
Trade and Public Catering	3159	650	7500	5200
Material and Technical Supply and Sale	76	3	30	120
Service Industry	300	80	1000	3000
Education	20	6	100	700
Computer Services	35	11	100	1000
Public Health and Welfare	80	6	100	120
Culture and Arts	40	14	60	200
Agriculture	80	10	140	1000
Total	5400	1140	15530	98440

According to the table 1 the biggest number of small business enterprises is in trade and public catering- 57% of all functioning, in industry is 17,5% and in construction is 12,3%.

In comparison with 1993, the number of small business enterprises involved in trade and mediator operation has increased in 1,3 times and small business enterprises involved in public catering increased in 2,2 times.

In the meantime, the number of small business enterprises involved in providing services of the social character, education, culture, arts, medical services has reduced in 40% and in construction and agricultural more than in half. Industrial structures of small business decreased in one third. "Commercialization" of small industrial enterprises is being observed. In order to survive they have to transit to trade and the share of their main produce is in process of reduction.

The number of local inhabitants employed in small business (including entrepreneurs) is 24.000. In 1997 only 230 of joint-ventures with foreign investors were functioning in Zhitomir region, the amount of investments was very insignificant.

Thus, small entrepreneurship actually remains on the initial stage of its development and does not play any noticeable role in the economy. Last year the volume of production of small business enterprises in region has totaled 8% and as for the consumer goods only 0,6%. Innovative small business enterprises are completely absent in Zhitomir region.

What are the main reasons of slow development of entrepreneurship?

To our mind they are:

- absence of benevolent legal base for the development of small business and its instability;
- psychologically unpleasant attitude to market reforms and entrepreneurship of the bigger part of population;
- high taxes;
- newly established small business enterprises are not able to start their operations because of absence of starting capital, technological equipment, production facilities etc.;
- state support of small business remains declarative, not real;

- absence of serious investments in small business including foreign ones.

In 1997, a business center of International Finance Corporation was established in Zhitomir, its activity is directed on development of small and medium business through consulting and assistance in business plans creation for the search of investments.

2. Analysis of Tendencies in the Sphere of Specialists Training during the Transitional Period to the Marked Economy

Ukraine has deep roots and long established traditions in education, the first Ukrainian university,- Kiyivo-Mogilyanska Academy,-was founded in 1632.

The Soviet Union Constitution declared the right to education absolutely free of charge (actually at the expense of the state budget). On the level of secondary education this right was realized. High education was in the Soviet Union and continues to be in Ukraine as a kind of elitarian since only 36% of school graduates were ensured of places at institutions of higher education.

We should like to underline the fact that in the former Soviet Union only the state educational establishments were allowed to function and only source of their financing was the state budget.

After the independence declaration Ukraine confronted several problems in the sphere of education:

- specialists training management was directed from Moscow, not from Kiyiv;
- teaching process at the majority of institutions of higher education was conducted in Russian, that is why textbooks and terminology in new fields of science in Ukrainian were absent;
- some specialties were not even taught in Ukraine (e.g. oriental languages);
- graduates from Ukrainian institutes of higher education were sent to work at enterprises of the whole Soviet Union;
- institutes of higher education were focused on mass specialists' training for enterprises of military industrial complex;
- there was observed disbalance in specialists' training in certain fields of science: approximately 70% of specialists were in natural sciences, engineers and agricultural specialists, while a small percent were economists and legal advisors, managers were not even trained at all (table 2 presents data of 1995 when the proportion little bit changed);
- uneven concentration of institutes of higher education in Ukraine in several centers,-Kiyiv, Kharkiv, Donetsk, Odessa, Dnepropetrivesk and Lviv,- the lion share, when population of other regions (especial Zakarpatie and Zhitomir regions) is deprived of such opportunity to obtain higher education (table 3);
- financing of education was done by residual principle which resulted in low salaries of teachers and bad technical-material base of education in general.

Tables 1 and 2 present some statistical data of the Ministry of Education of Ukraine.

Table 2. Specialists Training in Spheres of Knowledge (in % from total enrollment) in 1995

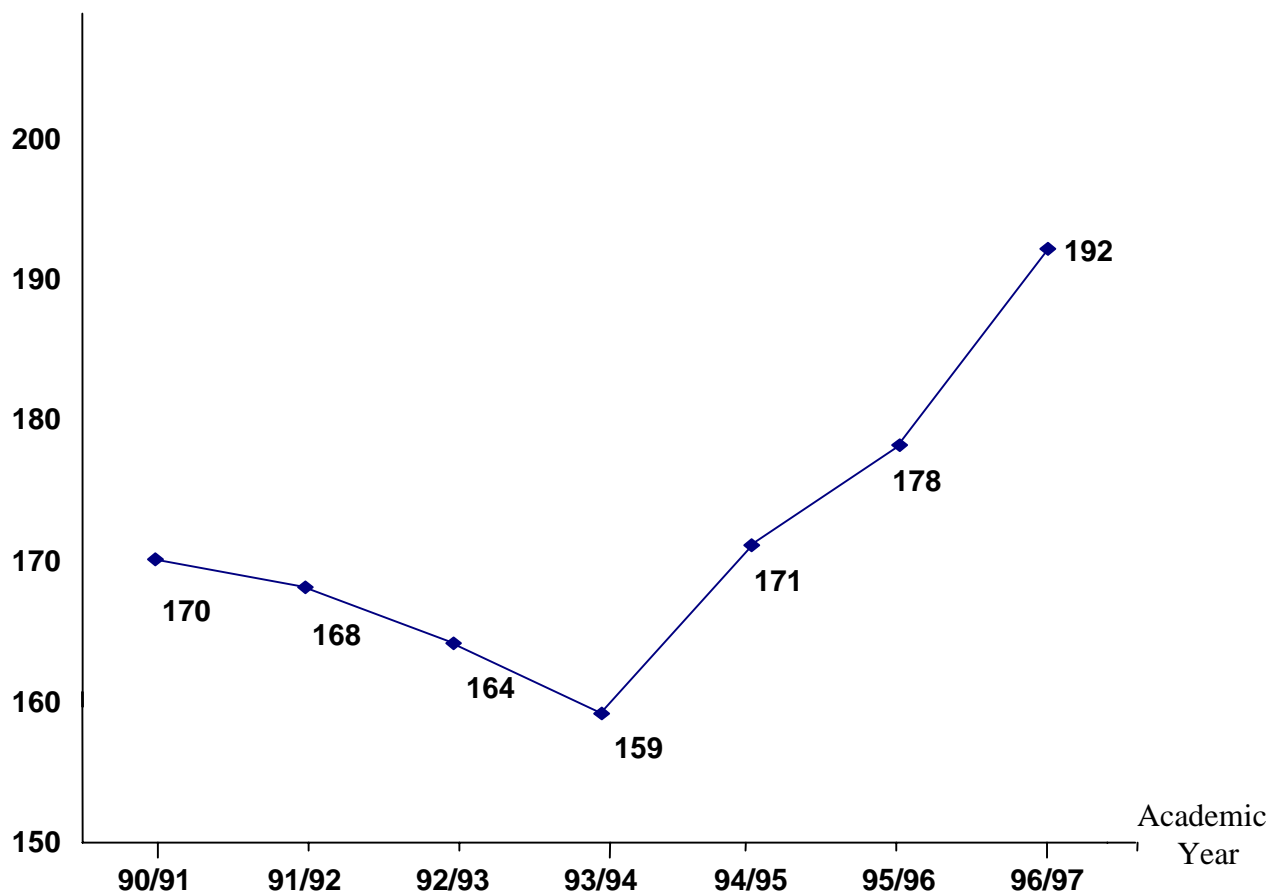
Country	Fields of Science				
	Education	The Humanities	Social Sciences and Jurisprudence	Agriculture, Engineering, Natural Sciences	Medicine
Canada	5	8	21	16	5
USA	7	13	30	17	10
France	3	24	21	19	11
Sweden	15	15	26	29	14
Russia	10	7	20	51	9
Ukraine	19	14	7	52	7

Table 3. The Net of the Institutes of Higher Education of the III-IV Levels of Accreditation and Contingent of Students

Region (oblast)	The Number of Institutes of Higher Education			Contingent of Students		
	1995	1996	1997	1995	1996	1997
Ukraine total	232	255	274	888 460	922 830	976 891
Kiev(city)	40	45	49	157 216	165 046	178 883
Kharkiv	33	36	38	131 551	135 526	140 645
Donetsk	20	21	24	72 058	76 387	81 461
Odessa	17	19	19	71 186	73 027	73 985
Dnepropetrovsk	15	16	16	69 862	70 446	71 636
Lviv	15	15	15	59 539	59 302	62 133
Zhitomir	4	4	5	8 775	10 599	11 416
Zacarpatie	1	1	3	8 376	8 533	9 225

The graph 1 below shows the changing the number of students per 10.000 of population at the institutes of higher education of the III-IV levels of accreditation (universities, academies, institutes) during 1990/91-1996/97 academic years.

The Number of Students per 10 000 of Population



Graph 1. Changing the Number of Students per 10.000 Population of Ukraine

During the first years of Ukrainian independence the number of students of institutes of higher education began to decline.

In 1991 the law of Ukraine “ About Education” was adopted, according to which: 1) there was recognized the right to existence of non-state educational establishments; 2) there was established that education could be obtained not only at the expenses of the state budget but also at the expenses of local budget, budgets of the state ministries, enterprises, organizations and even at the expenses of private individuals.

In 1992-93 there appeared a lot of non -state educational establishments, the majority of which due to different reasons became unable to function and in two or three years ceased to exist.

According to the Ministry of Education of Ukraine, at the present time 132 non-state institutions of higher education have obtained the right to provide educational services and have been chartered by the State Register. There study 24000 students, or 6% from the number of students in state institutions.

In 1993 state institutions of higher education obtained the right to accept more students than it was established by the state order, which is still financed by the state budget, these students are accepted on the basis of contracts (on the basis of payment). In 1994 state institutions of higher education of the III-IV levels of accreditation accepted 6% of students on the basis of contracts.

Table 4 represents absolute and relative figures characterizing enrollment of students to the state educational establishments of the III-IV levels of accreditation in 1995-97 years.

Table 4. Indicators of Enrollment of Students to the State Educational Establishments of the III-IV Levels of Accreditation

Year	Total of Enrollment	At the Expense of			
		State Budget	Local Budget	State Ministries and Enterprises	Private Individuals, Non-State Organizations
1995	178924/100%	138370/77,3 %	984/0,5 %	6920/3,9 %	32650/18,3 %
1996	189521/100%	126761/66,9 %	477/0,3 %	6475/3,4 %	55808/29,4 %
1997	204005/100%	108237/53,1 %	264/0,1 %	4901/2,7 %	90603/44,4 %

As it follows from table 4 there is a steady tendency of increasing the number of students at the Ukrainian institutions of higher education, this fact explains the soar of the curve at the Graph 1 from the point 1993/94 academic year. During the last three years the number of students who study at the expense of the state budget declined in 22% at the same time the number of students who study at the expense of private individuals and non-state organizations increased in about 3 times.

While comparing state and non-state institutions of higher education we can identify the following peculiarities.

State institutions of higher education possess established technical-material base and infrastructure, qualified teaching staff but at the same time they possess bulky system of management, substantial financed and organizational dependencies on state executive organs, they are not able to respond quickly to the changing demands of labor market. Under present circumstances, Ukrainian Government can not fulfil all the provisions of the Law “ About Education” and invest 10% of Gross National Product in the system of education. That is why wages of the teaching staff are low (a professor’s salary is about 150 USD monthly) and constantly delayed 3-4 months, and there are no funds for maintenance and development of the technical base . State Institutes of higher

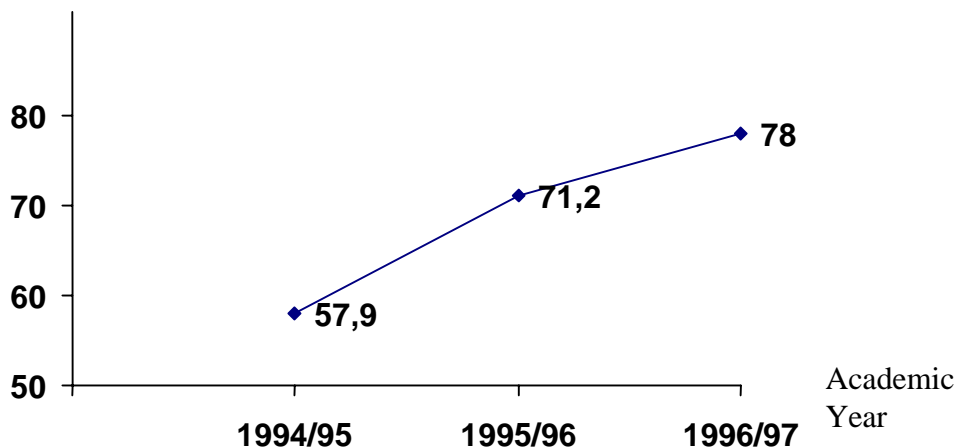
education have to search for additional sources of financing. In 1997 33% of the total amount of financing of the institutes of higher education was received from the non-budget sources, first of all from paid education.

Non-state institutions of higher education develop more dynamically, they efficiently respond to the demands of labor market. For example, they establish direct contacts with business firms to provide their students with opportunities to practice or obtain jobs. They conduct teaching process in smaller groups, having an opportunity of individual approach to teachers' payments. Such institutions pay wages and salaries on a regular basis, teaching process is often implemented with the help of authors' methods (International Institute of Linguistics and Law, Kiyiv). At the same time many of such institutions have problems with technical-material base and teaching staff.

3. Specialists' Training in Zhitomir region

The level of education in Zhitomir region is comparatively low. As for the number of places in the higher education institutes per 100 secondary school graduates and number of students per 10 000 of population it is one of the last statistics among all regions of Ukraine.

The Number of the Students
per 10 000 of Population



Graph 2. The Changing of the Number of Students per 10 000 of Population in Zhitomir Region

Graph 2 shows the increasing the number of students per 10 000 of population in Zhitomir region from 1994/95 to 1996/97 academic years. If compared with Graph 1, we can observe a general trend of increasing of the number of students in our region, but figures themselves are in 2,5-3 times lower than in the country in average.

There are 5 institutes of higher education of the III-IV the levels of accreditation,-Zhitomir Pedagogical Institute, Agro-Ecological Academy of Ukraine, Zhitomir Institute of Engineering and Technology (ZIET), Institute of Business and Advanced Technology (IBAT), Military Institute, and 22 institutes of I-II levels of accreditation (colleges, mechanical and technological schools and others).

The author of this report is directly related to two those above-mentioned institutes, he is Rector of state ZIET and by his initiative there was created a non-state institute in Zhitomir-IBAT and presently he is the President of the Supervising Council of this institute.

There has been much entrepreneurial activity in the growth and development of ZIET and IBAT.

ZIET

The institute was formed in 1960 and until 1994 it had been a branch of Kiyiv Politechnical Institute. Currently there are 4500 students and 480 employees at the Institute. Despite the bad situation of the economy, the Institute has not only preserved its technical and material base and teaching potential, but continues to grow.

- There was created a Lyceum of the ZIET, where 400 pupils, selected on a competitive basis study advanced courses of mathematics, English language, computer science, economics etc. They are preparing for entering ZIET or other institutes of higher education.
- The enrollment to the Institute within the period of 1992-1997 was increased in 4,5 times (Table 5).

Table 5. The Enrollment to ZIET

Year	92	93	94	95	96	97
The Number of Students Entered	280	381	631	1071	1275	1370
Including on the Basis of Contracts -----	-	31	401	731	1050	1174
% of the Total Number		8,1	69,5	68,2	82,3	85,7
% of Students Entered in Economics and Management	27,5	23,6	59,7	54,1	52,9	54,0

While fluctuation enrollment due to the state mandate has ranged from 350 places in 1993 to 196 places in 1997; the enrollment of students on the basis of contracts was increased by many times (in 1993- 31 students or 8,1%, in 1997-1174 students or 85,7%).

Considering market and demand of the students, the enrollment plan was changed in order to expand specialties of the economic and management profile.

- In 1991 the Institute trained only in 4 specialties, currently it trains in 12 specialties, including new directions of specialists training: “Economics”, “Management”, “Computer Science”, “Telecommunications”, “Mining Engineering”, “Ecology”, “Medical Engineering”.
- There was created the Faculty of Specialists Retraining, where specialists with higher education add a profile to their preparation and obtain a specialty which is in demand on the labor market (“Business Accounting and Audit”, “Production Management”, “Computer Science”).
- For students of engineering faculties there was created a system of two specialties and obtaining qualification in engineering and economic specialties simultaneously to graduation. Also, youths that are eligible for joining the army are able to obtain the qualification of military engineers.
- Several complexes were created together with institutions of the the I-II levels of accreditation (colleges, technical and technological schools), curriculums of these educational establishments were adjusted to the requirements of ZIET, which in its turn allows to reduce the term of the training at the Institute for their graduates by 1,5-2 years.
- The Ministry of Finance of Ukraine has defined ZIET as the basis institute in the region for improving the qualification of its regional employees (tax inspection, state treasury, control committee and other financial organs). The Institute, therefore, regularly conducts courses for improving the qualification of this categories of employees. Simultaneously, the Institute offers courses to improve the qualification of employees from other organizations, for example the Pension Fund.

All the types of activity mentioned above, the Institute offers on the basis of contracts with full compensation for its expenses.

Table 6 represents a change of the amount of own financing of the Institute within the period of 1992-97 (factual figures), as for 1998 we represent the planned indicators.

Table 6. Financing ZIET Own

Year	1992	1993	1994	1995	1996	1997	1998
% of Own Financing	3,6	18,4	23,6	39,5	49,3	69	77

As we can observe, only 3,6 % of the general amount of financing were funds, earned by the Institute and 96,4% was funds obtained from the state budget in 1992. In 1997 our state Institute earned 69% of annual funds and it plans to increase this indicator to 77% in 1998.

Institution funding helped to stabilize its financial state, lessened the dependence of its activities on the considerably reduced amounts of state funding and chronic delays that occur in receiving those funds.

For the last 4-5 years ZIET has at its own expenses conducted capital repairing of its teaching and laboratory facilities, dormitories, sports and health complex, has improved its material base (for example, it purchased over 100 up-to-date computers, two minivans and the means of operative printing). We also have replenished our library, subscribed to periodicals and published by our own means teaching and scientific literature.

With the Institute as a base we have created a regional center for Internet (funds for purchasing the server and personal training were granted by Eurasia Fund).

At ZIET attention is paid to conducting scientific researches. Scientific researches permit us to train specialists of the highest qualification and keep our teaching staff knowledge up-to-date in their specialty while increasing the attractiveness of the profile to students.

Although the volume of current work is not large, we have considerable high scientific potential, stable customers and high reliability. We, on a regular basis, organize large international scientific conferences: eg. "Fundamental and Applied Problems of Space Research" in 1993, "Aerospace Complex, Conversion and Technology" in 1995, "Contemporary Technologies in Aerospace Complex" in 1997.

The basic problems of the Institute at the present time are as follows:

- the drastic productivity slow down in Ukraine and demurrage of enterprises, deteriorates their usage for students' practice and creates difficulties for students of engineering profile;
- insolvency of many enterprises and organization, delays in wages and the growing poverty of the population have resulted in their financial bankruptcy and huge debts;
- limited international relations .

The Institute has signed agreement of cooperation with Oklahoma State University (USA), Bialystok Technical University (Poland), some Russian Universities. Our Institute is a member of European Association of International Education and Association of the Universities of the Black Sea region. But there has not been found a source of financing to implement these agreements yet (students and teachers exchange, new methods and subjects implementation, conducting scientific-research conferences, implementation of the distance education and etc.). We have not succeeded yet, to become a participant of the international educational programs, though the attempts to take part in the project competition of Tempus-Tacis program have been done.

IBAT

The Institute of Business and Advanced Technology is a non-state institute of higher education, which was established in March of 1992. The Institute's founders are joint-venture bank "Polissya" and several local individual investors (teachers of ZIET). Specialists' training is conducted in two specialties: "Finances and Credit" and "Informational Systems in Management". The first

enrollment of 94 students was in 1992. In the time being 730 students study and 101 employees including 77 teachers and professors work at the Institute. To our regret, only 31 teachers and professors are full time employees, the rest are part-time. The teaching process is conducted currently in rented premises. In 1996 the Institute purchased a building of a former cinema theater at the auction. After reconstruction of the building there will be 3000 sq.m. for Institute alone.

The Institute recently purchased two up-to-date computer classes and software. It is constantly looking to expand its library while its teaching staff actively works on the creation of new teaching materials and methods. The Institute works to introduce elements of distance education into the teaching process; in particular, video equipment has been implemented as a means of improving students' knowledge and preparation.

The IBAT actively seeks opportunities to expand its current activities. The Institute together with its students has become a founder of "Trial Ltd.", which is involved in whole sale trade and providing intermediary services.

According to the agreement with the State Commission on Securities and Stock Market, the Institute trains registrars of securities. The graduation of the first 50 registrars has successfully been conducted with the students' competition of a qualification exam for the registrars' certificate.

The IBAT is a regional representative of the Euroclub in Zhitomir region and performs cultural education work directed to a distribution of informational materials and knowledge concerning the European Community among the Ukrainian youth.

In 1997 the Institute conducted an international conference "Spiritual State of a Young Human Being".

The main problems, which have been confronted by the IBAT are following:

- difficulty in teaching staff selection of the necessary specialties and qualification;
- prejudiced and of the Ministry of Education of Ukraine;
- instability of legal base concerning education and taxes.

ZIET treats the IBAT as its younger brother and does its best to support and to assist it. Not often in Ukraine such positive relations can be found between state and non-state institutes of higher education.

As professor J.Stetar asserts (*): "Rectors of the state universities with their substantial influence over higher education policy are generally seen by their private sector counterparts as inimical to the development of private higher education. Viewed as anxious to maintain their monopoly over higher education, the state university rectors support higher education, only to extent that they- state universities-are free to develop private branches and institutes i.e., institutions are free from state control and entrepreneurial in outlook that can serve as revenue producing centers for their overall institutions..."

In seeking to create "private" appendages the state universities are exhibiting the same predatory behavior associated with any monopoly, - maintenance of the monopoly at almost any price".

American futurologist, while answering the question about what is to be done today to survive, recommended gaining knowledge as the main priority.

Ukrainian universities and institutes despite all the difficulties of the transitional period persistently follow this advice providing the youth with knowledge. This is better contribution to the future of the Ukraine.

*) Stetar J., Prof. Higher Education Innovation and Reform: Ukrainian Private Higher Education 1991-1996.-Seton Hall University.-1996.-p.32

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