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Current Aspects of Improving Innovative Potential in Students Majoring in Sports and Physical Culture

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Problem of a susceptibility of experts and the enterprises to innovations; the sociological analysis of predisposition of students to novelty and to scientific, inventive, administrative creativity; dependence of competitiveness of the expert on level of its inventive and innovative potential; formation of inventive and innovative potential at students as a condition of maintenance of their competitiveness; a high school role in formation of inventive and innovative potential at students; a role and a place of inventive and innovative processes in competitive space; dependence of realization of the social order «Creation of the competitive enterprises and formation of bases of competitiveness of the country as a whole» from level of inventive and innovative potential at experts.

Key concepts: a problem of a susceptibility of experts to innovations; formation of inventive and innovative potential.

The solution of the problem of receptivity to innovation can not exist without determining individual propensity to scientific, inventive, and managerial creativity.

According to our research, each individual can be characterized by the three major components that allow them to realize their intrinsic strength. Individual predisposition to the scientific, inventive, managerial creativity, tendency to innovation, receptiveness to innovations appear interrelated phenomena. It can not be ignored that they are inseparable from the law of competition. The latter predetermines the nature of the implementation of the individual predisposition to the scientific, inventive, managerial creativity, their propensity for novelty, receptivity to innovation. An individual

objectively finds themselves is a competitive medium, being affected by its influence all the time. At the same time an individual interacts with other individuals in this competitive medium. This can be explained both objectively and subjectively, namely by the extent to which an individual is self-conscious about the competitive media, whether they are ready to act, how they behave in the competitive space, how they interact with their competitors, and what the results of their actions in a competitive space are! These represent the integral characteristics of a competitive personality.

Social education, trade unions, personality are the bearers of immanent relations of competitiveness, and at the same time they are under the influence of the law of competition.

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Competition law defines the direction of their activities as a holistic phenomenon. Hence, it's necessary to define the functional role of each sphere of development of a competitive individual in the spheres of their activities (academic, professional, social, political, managerial, communicative as well as the role of individual peculiarities). A thorough analysis allows to represent them as a single functional structure, which provides a complete idea of the laws, significant relationships and dependencies of certain elements on others.

Multifaceted (multicomponent) activity which is caused by the development of personal qualities, is connected to the nodes by various relations and connections to other people.

Those nodes and their hierarchies form the integral characteristics of an individual and determine their professional development.

Numerous studies of the «Homo Concurrentions» concept made it possible to reduce three integral characteristics of the competitive personality: determination, competence, and flexibility.

These are the key concepts, each of them having several interpretations.

Due to the fact that in the paper we are focusing on the solution of managerial problems of receptivity to innovations in the competitive medium, we find it necessary to use the essence and relationship of the concepts presented in the sociological analysis of innovation potential of 2nd year students trained at the department of physical culture and sport.

Integral data obtained testify that male students possess a 1,3 % higher innovation potential than female students. It can be assumed that in certain aspects, girls may excel boys and males might have higher rates than average.

In order to obtain the characteristics of a determinant impact of the components in question on the innovative potential of both male

and female students a sociological analysis of their roles was carried out (Table 2).

Sociological data characterize the level of engagement of students in the processes taking place in society, local communities, university. Their identification with modernity, modern social processes, modern people, a sense of complicity with the progressive trends in developing of modern society is represented at the highest level according to a 10 point scale. Sociological information reveals the potential for the prospect of gaining more innovative capacity in the course of educational process.

It is also important that the rate of identification with modernity, and other determinants of innovation processes makes it possible to predict the availability of opportunities and trends in the formation of students' innovative potential, i.e.: the role of the ID component (determinant) allows to understand its trends and dependences regarding the innovation potential (IP) in developing competitive professionals of sport industry at various local enterprises, so that we can assume the following: the level of identification and level of innovation potential have a relationship whereby the higher the IP, the higher the level of identification, and vice versa

As it is widely known, complicity and personal identification with the social processes are inseparable from the informational processes in society. Information serves important social roles, including formation of inventive and increasing of innovative potentials. Sociological data evidence that the content of modern information flows is separated from the main challenges society has to face. (Table 3)

According to sociological data, the qualitative characteristics of information content (possibly, quantitative as well) implies significant changes in the provision of individual receptivity to the inventive and innovative

Table 1. Sociological analysis of innovation potential of 2 nd year students of the department of physical culture and sports (October 17 2009)

№	Questionnaire contents	estimation in points	
		Males	Females
Integral values		23.4	23.1
The gap in the data: 23.4: 23.1 = 1.3% in favour of males			

Table 2. Sociological data of the innovation potential of developing competitive professionals of the sport industry working at local enterprises (FFKiS students, 17 Oct 2009)

№	Questionnaire contents	estimation in points		
		95-105 M/F	60 80 M/F	Integral value of all students M/F
1.	I consider myself quite an up-to-date person	8.8/10.0	10.0/7.5	9.6/9.0

Table 3. Sociological data of the innovation potential in competitive professionals of sports industry at the local enterprises trained at the department of physical culture and sports(FFKiS students) October 17 2009

№	Questionnaire contents	estimation in points		
		95-105 M/F	60 80 M/F	Integral value of all students M/F
1.	Sometimes I feel annoyed at the messages\reports about recent discoveries in different fields of technology, especially those that I don't understand	10.0/6.6	5.0/7.5	6.6/7.0

processes, to the problems of developing competitive industries, the establishment and improvement of humanistic and intellectual innovation, safe lifestyles of social formations and their constituents.

Sociological information suggests that the innovative receptivity, individual predisposition to invention is dependent not only on the organizational, technical, and economic measures, but also on the nature of the information (generally, not only in the scope of one's interests). According to the sociological data, the following dependencies and trends of the informational component conditions can be educed:

1) the higher its performance, the greater orientation of an individual towards obtaining and using information in their daily routine;

2) information accessibility for males of the first group is 1.5 times better than for the females;

3) information accessibility in the second group is 1.5 times better for girls than for boys.

Hence, the up-to-date information is differently aimed at young men and women. Men in the first group with higher levels of innovation capacity are currently more demanding when it comes to information than their female peers. They lack the necessary information to increase their innovative potential.

Nowadays, a public opinion prevails that an individual is largely independent and autonomous in determining their success and achievements. This has a particular relevance to personal participation in making inventive and

innovative decisions. The individual determines possibilities of using achievements of scientific and technological progress for their development quite independently. E.g., now it has become impossible either to improve productivity, or personality development without computers and computer literacy. Moreover, it is a proper thing to recognize a typology « a computer person».

Sociological data concerning to what degree male and female students are equipped with computers imply that males and females pursue improving their readiness and development productivity in achieving most ambitious goals with the help of computing devices to the greatest extent possible. (Table 4)

According to the presented provisions and sociological data, the following conclusions are justified:

1) The use of computers greatly facilitates intellectual activity for boys and girls and is one of the conditions for their active participation in the inventive and innovative processes;

2) the trends and dependencies of the innovation potential on the group-oriented state in the development of innovative information and solution of problems of innovation with the personal participation take place

3) both boys and girls are equally aware of the role of computer literacy when putting to use and improving their capabilities.

One of the major problems of an individual is their social optimism when they are sure that they and their surrounding social environment can be involved in inventive and innovative processes which is positive from the standpoint of social progress. Sociological data show that female students are more optimistic in that particular aspect than males. (Table 5)5)

According to the sociological data, the number of young men and women from the first group with an optimistic assessment of the correlation between technical and social progress

differ insignificantly: the gap is ca. 6 %. At the same time, integral indices are not just high, but the number of female students with low level of optimism is about 1.6 times higher than that of males, i.e. female respondents often note the lack of any positive implication on this point. There is no doubt that the problem of world outlook plays a very important part here, as well as an adequate reflection of real processes in the society.

However, taking into consideration the fact that novation and innovation potential depends on the personal attitude and individual confidence that the technical and social processes are positive, it is only right to educe trends and regular interrelations:

1) confidence, optimism about the optimal interaction of scientific, technical and social progress are among the major determinants of the active participation of students in designing their inventiveness and innovation capacity

2) indicators of how a person really understands and perceives this relationship, testify that the students of the department are able to increase their novation and the innovation potential;

3) The higher these indicators, the higher predisposition of a personality and their confidence that the scientific and technological progresses are interconnected and aimed at solving the problems of social development of a personality and social formations;

4) personal characteristics strongly influence the level of innovation capacity;

5) integral indicators of requirements imposed by the girls surpass boys' level of estimates by 60 %.

One of the most important conditions for more fully utilizing the potential of subordinates is, as stated above, the awareness of the manager that their subordinates are predisposed to the scientific, inventive, managerial creativity. In addition, it was found that to control the inventive

Table 4. Sociological data of the innovation potential in developing competitive professionals of sports industry at the local enterprises (FFKiS students) October 17 2009

№	Questionnaire contents	estimation in points		
		95-105 M/F	60 80 M/F	Integral value of all students M/F
1.	I am planning purchasing or already possess a home PC	10.0/10.0	10.0/10.0	10.0/10.0

Table 5. Sociological data on innovation potential of would-be competitive experts in the field of sports activities at the enterprises trained at the department of physical culture and sports. The data were gained on october 17 2009

№	Content issues	estimation in points		
		95-105 M/F	60 80 M/F	Integral value of all students M/F
1.	I think that all judgments about the future are either far-fetched or are just imagination of their authors.	8.8/8.3	3.1/7.5	5.0/8.0

Table 6. Sociological data on innovation potential of developing competitive experts in the field of physical culture and sports at the enterprises trained at the department of physical culture and sports October 17 2009

№	Content issues	estimation in points		
		95-105 S / D	60 80 S / D	Integral value of all students S / D
1.	I think that only certain people are better suited for creative innovative activities.	2.5/1.6	3.8/5.0	3.3/3.0

and innovative processes the manager is supposed to be an inventor, and (or) an innovator themselves. This implies that the state of invention and putting into use is determined by the state of metafaktor.

Sociological data show that in reality the most part of the students have very vague notion of what was said above at this stage besides, they do not have any necessary world outlook information (Table6).

Sociological data and theoretical concepts of personal capabilities allow to make the following conclusions about the possible managerial capabilities of competitive experts in the field of sports activities at enterprises trained at the department of physical culture and sports:

1) as general innovation potential depends on how confident the person in charge is about the

potential of their subordinates, students majoring in physical culture and sports have significant gaps closing which can significantly improve their inventive and innovative potential;

2) as competitiveness of a specialist depends on their inventiveness and innovation capacity overcoming the existing positions is a major determinant in training specialists of high quality in the field of management ;

3) the level of students' awareness of their capabilities (their intrinsic strength), predisposition to scientific, inventive, performing creativity, inclination for novelty, and their reflection in the personality searching for their role in the scientific, technical, social work is a prerequisite for the formation of competitive specialists in different fields;

4) the development of managerial capabilities of a personality, is possible only if sociological data are available and this characteristic feature at the university, aimed at the development and putting in use novation and innovation propensity can be analysed.

References

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Актуальные аспекты повышения инновационного потенциала у студентов спортивно-физкультурного профиля

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Проблема восприимчивости специалистов и предприятий к нововведениям; социологический анализ предрасположенности студентов к новизне и к научному, изобретательскому, управленческому творчеству; зависимость конкурентоспособности специалиста от уровня его изобретательского и инновационного потенциала; формирование изобретательского и инновационного потенциала у студентов как условие обеспечения их конкурентоспособности; роль вуза в формировании изобретательского и инновационного потенциала у студентов; роль и место изобретательских и инновационных процессов в конкурентном пространстве; зависимость реализации социального заказа «Создание конкурентных предприятий и формирование основ конкурентоспособности страны в целом» от уровня изобретательского и инновационного потенциала у специалистов.

Ключевые понятия: проблема восприимчивости специалистов к нововведениям; формирование изобретательского и инновационного потенциала.
