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A Sociological Diagnosis of Workers' Propensities for Innovation

As an institution, education is one of the “driving forces” that is capable of bringing the country out of its sociocultural crisis. The conception of the Federal Target Program for the Development of Education, 2006–10, emphasizes that the role of education in accomplishing social and economic tasks specifically involves the development of the sphere of innovation. In turn, the implementation of top-priority national projects will make it possible to “raise education to the level of innovative development” and thus constitute one of the most important directions in the state’s educational policy; it is a major topic of discussion among scientists, officials, and the public at large.

One current aspect is the problem of the *sociological diagnosis* of innovative activity in a regional educational space. Of course, only a few of its segments can be examined in the framework of sociology. By means of sociological methods it is possible to attempt to discern the characteristics of the acceptance of processes of innovation by the participants in those processes, the level of their competence in the sphere of innovation, the degree of their

preparedness for innovation, and typical models of innovative behavior. These are key characteristics, inasmuch as the state and prospects of innovative activity in education largely depend on the necessary competence of the cadres and their readiness to take part in the process of innovation. D.L. Konstantinovskii has emphasized the following: “No ‘breakthrough’ or ‘qualitative leap’ is even thinkable unless there are people who put into it their intelligence and their skills and talents and who know how to win in the competitive struggle. Such winners do not come all at once or out of nowhere. The experience of history suggests this banal truth: such winners emerge only in a country where the level of education is high enough” [1].

Sociological diagnosis makes it possible to determine the characteristics of the “innovative propensities of workers in education,” that is, the degree of a worker’s readiness or predisposition to take part in innovative activity. Such propensities play a key role in the development and implementation of new things in the process of education; it is by means of bringing influence to bear on them that it is possible to influence its effectiveness, success, and quality. The innovative propensities of workers in the system of education, in our opinion, are made up out of several elements:

- attitudes toward innovative processes and value;
- receptivity to new things;
- level of active innovative involvement;
- readiness to learn new things.

We attempted to assess the state of these elements in the sociological survey “Management of Processes of Innovation in a System of Education.”¹

1. *Attitudes toward innovations* represent a sociological category that explores both the objective position of the worker in a system of education and his subjective view of the process of innovation.

The survey found that most respondents (67.54 percent) have a positive attitude toward innovations; 25.73 reported a “positive” attitude, while 41.81 percent reported an attitude that is “rather more positive than negative.” Moreover, the most positive attitudes toward new things was characteristic of people working in institutions of primary professional and secondary specialized educa-

tion, where the indicators of a positive receptivity to new things stand at 35.38 percent and 31.46 percent, respectively. This type of position is the least characteristic of people working in primary professional education, 33.85 percent; it is the most characteristic in the case of instructors in institutions of higher learning: 44.10 percent. A total of 15.68 percent of workers in education are characterized by an attitude toward innovations that is "rather more negative than positive." This is reflected the least prominently in the case of instructors in secondary specialized educational institutions (10.11 percent). An attitude toward innovations that is "unequivocally negative" is typical of 4.22 percent of the respondents. This indicator is the highest among people working in general secondary education (5.81 percent) and higher professional education (6.83 percent).

The reasons for this attitude relate not so much to fear of negative consequences as a result of innovations that have not been thoroughly thought through (in the long run, both school teachers and college and university instructors give quite a high rating to specific innovations). Rather, it has to do with the fact that processes of innovation are in conflict with the corporate subjective attitude (mentality) of groups of workers in regard to the educational space that is under their control.

On the whole, however, the data obtained make it possible to diagnose the existence of a moderately positive attitude toward innovations on the part of most people working in education. In our opinion, there are two explanations for this position. First, in this case we are seeing the traditional conservatism that characterizes people working in the system of education, a conservatism that stems from an understanding of the high cost of any innovations that have not been thoroughly thought through in this sphere. Second, attitudes toward innovations are in direct correlation with people's perception of how effective they are. Thus, for example, if innovations are carried out effectively, it is only natural that the respondents will give them a higher rating.

In spite of the characteristics of these dispositions, the results of the survey enable us to conclude that for the most part, workers in the system of education have come to form "innovative values." This term is generally used to designate "a real or ideal object

with respect to which individual instructors or the entire social group in question develop an attitude that predisposes them to have respect for it and they assign to the object a vital role” in their innovative pedagogical activity and life and do their best to accomplish it [2]. It is reasonable to assume that the kind of specialist in the system of education who can be considered a worker who possesses fully formed innovative values is one who assigns vital importance to innovation, makes use of them in his own activity, and assigns to processes of innovation an important role in his own pedagogical work.

The results of the survey have shown that 44.72 percent of workers in the system of education assign vital importance to innovations.

Another, indirect indicator of fully formed innovative values is that almost three-quarters of the workers surveyed make use of innovations in their activity.

However, caution is advised when rating how well formed innovative values are. Even though the reception of innovations is positive overall, only 19.1 percent of the workers in the system of education in the region rate the use of it in their own activity as “a component that is unquestionably important.” More than half of the respondents (57.09 percent) see it as “rather more important than not important.” It is worth noting that one out of every nine workers in education who make use of innovations rates their use in their own activity as “rather less important than important.”

It is our opinion that these rather restrained ratings are due to the fact that in actual educational practice, innovations have not produced the effect that they are supposed to. This is true, in particular, of the general education schools. A total of 50.22 percent of the schoolteachers say that the adoption of innovations in their schools has been effective; in the case of institutions of primary professional education, secondary specialized educational institutions, and institutions of higher learning this indicator stands at 56.92 percent, 68.84 percent, and 64.59 percent, respectively.

2. *Receptivity to innovations.* In Western surveys, the term “receptivity” is often used in the meaning of “reception” (adoption) of an innovation and is treated as the decision to use a particular innovation [3]. Workers in the system of education are extremely

cautious toward innovations being adopted. Only 7.64 percent of the respondents actively adopt innovations in the educational institution where they are working. The particular indicator is the highest among people working in institutions of higher learning (10.56 percent); it is the lowest in the case of instructors in secondary specialized educational institutions (2.25 percent). These differences in the reception of innovations are extremely noteworthy, especially when we consider that it is people working in secondary specialized educational institutions that are the most likely to rate innovative activity in their own institutions as effective. It is quite likely that to a large extent this effect is the consequence of a cautious attitude toward innovations.

Incidentally, this reception is typical of a substantial portion of the respondents. A total of 46.63 percent of them say that they are willing to take active part in innovations after having carefully weighed all the circumstances. On the average, one out of every four workers in education "takes part in innovations only when assigned to do so by the administration." A total of 13.07 percent of the educators report that they take part in innovations in consideration of corporate solidarity.

It is our opinion that the cautiousness and restrained nature of the specialists' position stems both from the traditional conservatism of the system of education, as noted above, and from their anticipation of negative consequences as a result of innovations in the sphere that have not been adequately thought through. Unfortunately, a substantial portion of these innovations were adopted by imposition "from above," at the initiative of administrators of subsystems of education and individual institutions, and this, in turn, is a factor that causes workers to be oriented first and foremost toward their own common sense and professional experience when it comes to determining the value of an innovation.

3. *The level of innovative activity on the part of workers in the system of education* is characterized by the frequency of use of innovative abilities and skills. What we mean by innovative abilities is a person's capability of accomplishing innovative tasks, during a certain amount of allotted time and with a certain level of quality, on the basis of the knowledge and experience that he has acquired.

The most important skills and abilities that are essential to permit engaging in innovative activity are the following: the planning of innovation; study of the conditions that are necessary to carry out innovations; systematic analysis of the process of adoption of innovations; measures to ensure that the innovations have the necessary resources; incentives for participants in the search for innovations; constant information and analysis support for the process of innovation (monitoring); supportive control; control; and reflexive analysis of the experience being developed.

In the course of our survey, 73.46 percent of the respondents stated that they do make independent use of these actions in their own work. Such an assertion, in and of itself, is not an indication of the level of development of their abilities and skills, but, at the very least, it makes it possible to assume that they are in place, inasmuch as practical experience that is more or less intensive can certainly lead to the formation of practical experience.

Based on the survey it is reasonable to say that despite their initially cautious attitude toward innovative undertakings, workers in education later on usually became actively involved in innovative activity. This is the result of respondents' understanding of the importance of innovative activity, as well as a reflection of a verbal demand on the part of the system, the administration of which is of a bureaucratic character and is based on the discipline and responsibility of the workers. In our opinion, the first circumstance is of greater importance, confirmed by an analysis of the indicators of people's readiness to master new things.

The respondents make use of pedagogical innovations the most often in their activity, while they use technological and organizational innovations much less often. These findings give good grounds for formulating a fairly significant thesis: in a regional system of education, the process of innovation is first and foremost a pedagogical process. To a much lesser degree it has to do with any organizational and technological mechanism of educational activity, which, in many respects, remains formal and bureaucratic, not receptive to innovative policy. It is no accident that 34.38 percent of the experts said that the chief obstacle to the adoption of innovations was ineffective management.

4. *Readiness to adopt new things.* Readiness to engage in an activity represents a complex dynamic system that includes the intellectual, emotional, motivational, and volitional aspects of the actor. Many researchers say that one form of such readiness is a person's mindset, which, according to D.I. Uznadze, is to be interpreted not as a particular psychological phenomenon but rather as the state of the integral subject. Readiness to engage in an activity includes attitudes that are both conscious and unconscious, models of probable behavior, the determination of optimal means of activity, a person's assessment of his own abilities as these are in accord with the difficulties that he faces and the necessity of achieving a particular result. In its structure, a readiness to engage in innovative activity constitutes a structured formation. In our opinion, motivational readiness is of decisive importance.

In the opinion of the experts, it is most often the case that the participants in the adoption of innovations in the system of education are guided by motives of self-assertion by way of the result and a feeling of success (81.25 percent), the hope that achieving the desired result will necessarily bring recognition and rewards (71.88 percent). A comparatively smaller number of workers in education, in the opinion of the experts, are motivated by the chance for personal and professional self-development and an improvement in their material well-being.

In this case, the experts define the hierarchy of workers' motivations quite precisely. A relative majority of them (43.82 percent) take part in innovations if they are certain that the innovations will be successful. Of considerably less importance are motives relating to public recognition and an inner conviction that the innovations are necessary (these are mentioned by 21.11 percent and 11.26 percent, respectively, of the participants in the survey).

It follows from our analysis of the data that a low level of innovative activity in a system of education is, as a rule, due to the lack of a practical, tangible result, and also to an inadequate level of interiorization of the aims of innovative transformations, as well as inadequately developed practices of providing incentives for the adoption of innovations.

Our survey of the innovative propensities of workers in educa-

tion makes it possible to state that at the present time they are not characterized by a self-organizing, synergetic foundation. Propensities are extremely unstable; they are formed under the influence, first and foremost, of external factors.

Note

1. November and December 2004, seven raions and four cities in Belgorod Oblast; workers of education on all levels of the regional system of education; a questionnaire survey based on the method of a multistage sample (quota and series), with $N = 995$. An expert survey was carried out at the same time, with $N = 32$.

References

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3. "Innovatsii v obrazovanii: poniatie, sushchnost', kharakteristika i klassifikatsiia" [Innovations in Education: Concept, Nature, Characterization, and Classification]. Available at www.tspu.tomsk.ru/student/1/innovae1.htm.