

*Materials of Conferences***THE RELATIONSHIP BETWEEN DECISIONS AND KNOWLEDGE**

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The picture of world's development during last hundred years shows, that side by side with big scientific and technical progress there also occur scale regressions: two world wars, global warming, breach of harmony between economical and spiritual development, wide spread of drug business and of weapons of mass destruction, ecological problems, replacement of more fair social foundations by less fair, presence of double standards etc testify to the presence of considerable shortcomings at the general development of humanity. The truth can't defeat the lie. The number of problems considerably exceeds probable ways of their solving. All these cataclysms are the result of wrong decisions, which were reached at the global and local level. One of the west thinkers has characterized philosophy of development of last century like this: "when the last tree is cut, when the last fish is caught, when the last river is poisoned, people will understand that money is not edible."

All these undesirable phenomena that have place at the development of humanity indicate that old criterions and measures of values definition lost their power and there is a necessity in new methods of assessment. At one old aphorism saying goes: "there is no bigger happiness than the measure, measure is the base of harmony". If harmony was broken, that means, there are necessary new ideas, models, criterions and measures.

All these deviations from the straight and narrow are implicitly connected firstly with insufficient level of scholarship of elite stratum of planet's population. Secondly with the absence of true methods of value assessment, including assessment of knowledge of students.

Every day each officer (or person) reaches tens of decisions. Per annum the number of such decisions, which are reached by person, averages many thousands. Obviously not all reached decisions are perfectly true, the part of them undoubtedly false. The reason of these mistakes is hidden in shortcomings that occur at the educational systems. Between mistakes, which are made while reaching of decisions at the system of direction and at the system of education, there is interconnection. The aim of this work is to reveal this connection.

At previous works [1-2] there was offered new nonlinear scale and new criterion of knowledge assessment and as the model there was suggested

to take the glass of liquid. There was suggested that liquid that is situated in the glass is the "liquid of knowledge".

Let's mark the height of full part of glass as L_k , empty part as L_d , and the overall height as L_o . Apparently, these parameters are interconnected:

$$L_o = L_k + L_d . \quad (1)$$

As the new criterion there was suggested to consider ratio of length of segment L_k to the segment L_d . At previous works this ratio was called the factor of quality and was marked with K letter. There K acts as the new criterion of knowledge assessment, because:

a) in case when $K \gg 1$, $L_k \gg L_d$, the educational system is irreproachable.

b) in case when $K = 1$, $L_k = L_d$, the educational system has the middle condition.

c) in case when $K \ll 1$, $L_k \ll L_d$, the educational system is absent or it is paralyzed.

In the first case (a) the digested part of material is much more than undigested one. In the second case (b) they are equal. In the third case (c) the digested part of material is much lesser than undigested one.

If we divide both of sides of formula (1) to L_k , we'll receive the formula:

$$h = \frac{1}{1 + K} . \quad (2)$$

It's easy to understand that h characterizes the shortcoming of knowledge, more exactly the relative value of missing knowledge or "ignorance". As we see from the formula (2), with the increase of K , the relative value of "ignorance" – h decreases.

It's clearly that when:

a) $K \rightarrow \infty$, $h \rightarrow 0$; studying educational material was fully digested.

b) $K \rightarrow 0$, $h \rightarrow 1$; studying educational material was fully undigested.

The meaning of these results consists in that it creates the possibility of creation of interconnection between relative error of reached decision and relative shortcoming of information (ignorance). At the work [3] there was shown that error of decisions is proportional to lack of information:

$$\Delta Q = c h . \quad (3)$$

Here, ΔQ is an error of reached decision, c is the coefficient of proportionality. ΔQ is defined by formula:

$$\Delta Q = Q_a - Q_t .$$

Here, Q_a is absolutely right decision, Q_c is current decision. Obviously, that while the approaching of Q_c to Q_a , the error of decision ΔQ approach to zero.

In consideration of (2) in (3) we receive:

$$\Delta Q = c h = c L d / L o = c l L d . \quad (4)$$

where, $c l = c / L o$. From the formula (4) it follows that while $L d \rightarrow 0$, $\Delta Q \rightarrow 0$ that means that there was reached a error-free decision. It's clear that it happens only when $K \rightarrow \infty$.

For example, if one of the students from 100 questions rightly answered on 98, and other student on 88, then obviously that lack of knowledge fro first student will be 2%, and for second student will be 12%. It's obviously that error of reached decisions in conditions of big values of knowledge's lack (12%), accordingly will be considerably bigger as compared with first student.

Thereby we receive that error of reached decision depends on the level of incompetence of individual. To right decisions we can go by means of irreproachable education. In that consists the philosophy of struggle for qualitative education.

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References

1. Askerov H.G. Knowledge assessment: the search of rational variant // National education. – 2004. – № 1. – P. 141.
2. Asgarov Sh.G. The philosophy of knowledge assessment // Journal of Qafqaz University. – 2004.– № 13. – P. 63.
3. Asgarov Sh.G. International conference “Application of information-communication technologies in science and education”. Baku, 01-03, November. – 2007. – Vol. I. – P. 119-123.

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