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Development of Communicative Tolerance among Teachers of Primary and Senior Level of the General Education School

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Abstract

The article is devoted to the study of the influence of the level of development of communicative tolerance on the effectiveness of the teaching and educational activity of primary and senior schoolteachers. In the article the concepts of psychophysiological and communicative tolerance are separated. The psychological content of communicative tolerance is revealed. It is established that teachers of primary and senior schools do not differ from each other on the level of development of communicative tolerance. When the experience of teachers grows, the level of development of communicative tolerance among teachers of both groups firstly increases, and then decreases. The peak of development of communicative tolerance among primary and senior school teachers falls on different periods of work. The level of development of communicative tolerance affects the effectiveness of educational activities of teachers of the first and second levels of training and does not affect the effectiveness of studying ones.

Keywords: communicative and psychophysiological tolerance, pedagogical, studying and educational activities, professionally important qualities of the teacher.

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1. Introduction

In this article, we will talk about the social or communicative tolerance of a teacher. Even the most general analysis of pedagogical activity shows that social tolerance belongs to the category of the leading professionally important qualities of a teacher. Indeed, during the pedagogical process, the teacher has to communicate with various categories of people, including pupils, parents, school administration, representatives of educational authorities, members of the board of trustees.

Very often, the main participants in the educational process have different views on the issues of education and upbringing. Nevertheless, the teacher must take into account all the positions, understand different points of view and, one way or another, take them into account in the course of pedagogical activity. But this is possible only if the teacher has a well-developed social tolerance.

The need for social tolerance is also due to the fact that at present the social differences between pupils and, accordingly, parents have increased significantly. The individual psychological differentiation of schoolchildren continues to increase. In each class, you can meet children from very rich and very poor families, with very low and very high abilities.

The interethnic differences are added to the social and individual features. Practically in any class we meet children of different nationalities, which until recently was not typical for schools in central Russia. In addition, among the Russian population a large percentage of migrants from the former union republics appeared, which also carry a different ethnic mentality. All this puts high demands on the social tolerance of the teacher.

Taking into account the high practical and theoretical relevance of the problem of communicative tolerance (CT), we repeatedly turned to the study of its various aspects (Povarenkov, 2003; Povarenkov, 2005; Povarenkov, 2014).

In particular, it was proved that communicative tolerance is a professionally important quality of the teacher, i.e. the level of its development positively affects the effectiveness of pedagogical activity. Taking this fact into account, within the framework of this article we will try to solve the following problems:

- to reveal the specificity of development of CT for teachers of the junior and senior level of the school;
- to confirm the fact that CT is a professionally important quality for teachers of the general education school;
- to clarify the influence of the level of development of CT on the effectiveness of the educational and upbringing activities of the teacher.

2. Materials and Methods

The study was attended by teachers of secondary general schools in Kotlas town, the Kotlas district of the Arkhangelsk region in the number of 273 people. The choice of respondents for the study consisted of teachers of secondary schools with a professional experience of 1 to 41 years, with higher and secondary special education. The age of teachers was from 18 to 67 years. The study involved primary school teachers, middle and senior managers. Teachers of middle and senior level were united in a common group, which we later referred to the "senior teachers".

To diagnose the communicative tolerance of teachers, the author's method "Communicative Pedagogical Tolerance (CPT)" was used, which passed the standard check for validity and reliability, as well as the well-known methods of V.V. Boyko (Almanac..., 1995) and D.B. Zinoviev (Zinoviev, 2000).

The effectiveness of teachers' activity was evaluated during the expert survey. As the experts were the heads of the corresponding link for educational and upbringing work, as well as experienced teachers-methodologists. In the course of the expert survey, the methodology "The coefficient of efficiency of educational activity" of N.B. Avaluev was used, which made it possible to evaluate the effectiveness of both teaching and educational activities of teachers in accordance with modern standards of teacher training (Avaluev, 2003).

3. Results

1. *The general level of development of communicative tolerance among teachers of primary and senior level of the general education school.*

In planning this study, we assumed that due to the specificity of the CT contingent, teachers of different levels of training will differ qualitatively and quantitatively. In other words, we assumed that for effective interaction with schoolchildren of different ages, a different level of development of CT is needed. The data we are interested in is presented in [Table 1](#).

From the table it is clear that according to all methods the teachers of the senior level demonstrate a slightly higher level of CT development, but these differences are not statistically significant. Therefore, it can be argued that our first hypothesis was not confirmed, since teachers working with junior and senior schoolchildren do not differ in the level of the CT development.

Table 1. Level of development of communicative tolerance

Methods for diagnosing communicative tolerance	Teachers of primary level			Senior teachers		
	X	δ	Cv	X	δ	Cv
Methods V. V. Boyko	75,7	15,0	19,0	75,9	15,1	19,0
Methods D.V. Zanoviev	7,31	3,06	42,0	7,70	3,14	41,0
Author's Methods	12,5	4,32	34,0	12,8	4,24	33,0

Note: X is the arithmetic mean; δ is the standard deviation; Cv - coefficient of variation. Student t-test value: 0.01. Differences are statistically insignificant ($p = 0.99$) (Methods of V.V. Boyko); Student's t-test value: 0.09. Differences are not statistically significant ($p = 0.93$). (Methods of D.V. Zanoviev); Student's t-test value: 0.05; The differences are not statistically significant ($p = 0.96$) (Author's Methods).

2. Dynamics of the development of communicative tolerance among teachers of different levels of training.

At the next stage of the study, the patterns of changes in CT of teachers were studied, depending on the length of teaching experience.

Correlation analysis showed that the relationship between the level of development of CT and the pedagogical experience of teachers in primary and senior schools is negative. The correlation coefficient is respectively equal to -0.23 and -0.27 for $p = 0.01$. This means that the more the teacher's experience is the lower is his/ her CT and this is noted in both studied groups of teachers. The subsequent analysis showed that the relationship between CT and pedagogical experience is not so unambiguous.

Using the percentile method, we divided the pedagogical experience into five stages and tracked how the level of CT development varies in different periods of work experience (see [Table 2](#)).

Table 2. Dynamics of communicative tolerance of primary and senior teachers at different stages of professional development

Pedestage in years	Teachers of primary level			Senior teachers			Student's t-test value:
	X	δ	Cv	X	δ	Cv	
1 – 4	58,2	16,9	29,0	66,4	21,8	33,1	0.30 $p=0.77$
5-7	75,8	16,1	21,2	67,7	16,6	25,0	0.35 $p=0.73$
8-11	68,0	16,1	24,0	69,5	17,3	25,2	0.06 $p=0.95$
12-20	63,5	19,3	31,0	63,5	17,5	28,2	0 $p=1$

21-41	55,1	15,7	29,4	58,1	17,0	29,1	0.13 p=0.9
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Note: X is the arithmetic mean; δ is the standard deviation; Cv is the coefficient of variation. Differences are not statistically significant.

In the course of the analysis of the obtained data, the following data was established:

- in both groups of teachers there is a cyclic change in CT: initially it increases, reaches a peak and then begins to decrease; the minimum its reaches at the experience of teachers 21–41 year
- for teachers of the junior level, the peak of development of CT is 5–7 years, and for senior teachers – 8 to 11 years of experience, i.e. it comes a few years later;
- this dynamic completely coincides with the change in the effectiveness of pedagogical activity, depending on the length of service. It means that the CT increases as long as the effectiveness increases and begins to decline when the latter decreases.

The change in the direction of the dynamics of the indicators to the opposite indicates that qualitative changes in the mechanisms of professional development of CT are taking place. Since these changes coincide with a decrease in the effectiveness of professional activity, it can be assumed that destructive mechanisms of development from this moment begin to prevail over constructive ones. At the same time, the activation of destructive mechanisms of development of CT in primary school teachers begins a few years earlier than that of senior teachers.

4. Discussion

1. The link of CPT with the effectiveness of pedagogical activity

At this stage of the study, we will try:

- 1) to confirm (or disprove) the previously obtained data that CT is a professionally important quality (PIQ) for teachers;
- 2) make sure that this is true for teachers of different levels of training. In doing so, we will adhere to the understanding of PIQ, which is fixed in the works of A.V. Karpov ([Work Psychology, 2003](#)). He defines PIQ as follows: "these are individual properties of the subject of activity that are necessary and sufficient for its implementation at a normatively set level and which significantly and positively correlate with at least one (or several) of its performance parameters – quality, productivity, reliability ([Work Psychology, 2003: 190](#)). From this definition follows that the main criterion for classifying an individual quality to PIQ is its significant relationship (correlation) with the parameters of the effectiveness of the activity.

Let us turn to [tables 3 and 4](#), in which the data of interest are presented, they indicate the following:

- the level of development of CT is significantly related to the effectiveness of educational and studying activities of primary and senior training teachers, as well as the effectiveness of pedagogical activities in general;
- the magnitude of the connection between CT and the effectiveness of teachers' upbringing activities is approximately two times higher (statistically significant) than with the effectiveness of their teaching activities; and this is typical for both elementary teachers and senior teachers.

Table 3. Relationship between the level of development of communicative tolerance and the effectiveness of the educational and upbringing activities of the teacher (junior level)

CommunicativeTolerance	EDI	EVD	EPD	Medium
Methods of V.V. Boyko	0,23*	0,58***	0,46**	0,42
Methods of D.V. Zanoviev	0,18*	0,55***	0,36*	0,36
Author's Methods	0,25**	0,63***	0,49**	0,46
Medium	0,22	0,59	0,44	

Note: the level of significance of the Pearson correlation coefficient:

* -0.05; ** - 0,01; *** - 0.001

The obtained data indicate that CT is more closely related to the educational work of the teacher, which, unlike the training activity, is regulated in a much lesser degree and requires a

more subtle account of the individual characteristics of the student's personality. The higher the level of development of CT in a teacher, the more successfully he copes with the tasks of educational work. With respect to teaching activity, this trend is much weaker.

Table 4. Relationship between the level of development of communicative tolerance and the effectiveness of the educational and upbringing activities of the teacher (senior link)

Communicative Tolerance	EDI	EVD	EPD	Medium
Methods of V. V. Boyko	0,26**	0,48***	0,26**	0,33
Methods of D.V.Zanoviev	0,26**	0,49**	0,32*	0,36
Author's Methods	0,30**	0,58***	0,44**	0,44
Medium	0,27	0,52	0,34	

Note: the level of significance of the Pearson correlation coefficient:

* -0.05; ** - 0,01; *** - 0.001

2. *The impact of CT on the effectiveness of teaching and educational activities of teachers.*

At this stage of the research, we are faced with the task of confirming that CT is a professionally important quality teacher, but somewhat from a different perspective. The fact is that V.D. Shadrikov gives a more specific definition of PIQ than we discussed above.

"By professionally important qualities," he writes, "we will understand the individual qualities of the subject of activity that affect the effectiveness of the activity and the success of its development" (Shadrikov, 2007: 86). It follows from the definition that the author applies only those qualities of the individual to the PIQ, which, above all, affect the efficiency of performing activities, including not only professional, but also educational and professional activities. Therefore, the main criterion for the detection of PIQ in this approach is not the strength of the correlation of the CT with the effectiveness of the teacher's activity, but the degree of influence of CT on the effectiveness of its performance.

Therefore, to test this hypothesis, we used not the correlation coefficient, but the multiple regression coefficient, which shows the degree of influence of one factor on another. In this case, we are interested in the influence of the level of development of CT on the effectiveness of the teaching and educational activities of the teacher. The data we are interested in are presented in Tables 5 and 6.

Table 5. Influence of the level of development of communicative tolerance on the effectiveness of the educational and upbringing activities of the teacher (junior level)

Communicative Tolerance	EDI	EVD	EPD	Medium
Methods of V. V. Boyko	-	0,33**	0,21*	0,27
Methods of D.V. Zanoviev	-	0,31**	0,13*	0,24
Author's Methods	-	0,40**	0,27*	0,34
Medium	-	0,35	0,20	

Note: the level of significance of the multiple regression coefficient:

* -0,05; ** - 0,01; *** - 0.001

The materials presented in the tables indicate the following:

- the level of development of CT does not affect the effectiveness of training activities of teachers on junior and senior level (significant coefficients of multiple regression are absent);
- the level of development of CT significantly affects the effectiveness of educational activities of teachers of junior and senior level (significant coefficients of multiple regression were revealed);
- as for primary school teachers, the influence of the level of development of CT on the effectiveness of the educational activity is significantly higher than that of senior teachers

Table 6. Influence of the level of development of communicative tolerance on the effectiveness of the educational and upbringing activities of the teacher (junior level)

Communicative Tolerance	EDI	EVD	EPD	Medium
Methods of V. V. Boyko	-	0,18*	0,20*	0,19
Methods of D.V. Zanoviev	-	0,24*	0,18*	0,22
Author's Methods	-	0,33*	0,20*	0,27
Medium	-	0,25	0,19	

Note: the level of significance of the multiple regression coefficient:

* -0,05; ** - 0,01; *** - 0.001.

The obtained data indicate that CT is professionally important in relation to the educational activity of the teacher. And the positive impact of CT on the effectiveness of pedagogical activity in general, which was recorded in previous studies and this work, is due to this fact.

5. Conclusions

The analysis allows us to draw the following conclusions:

1. The obtained data confirm the previously recorded fact that CT is a professionally important quality for primary and senior school teachers. However, it is established that the level of development of CT is two times less associated with the effectiveness of training activities (compared to educational activities) and affects only the effectiveness of educational activities, what is evident from significant coefficients of multiple regression.

2. In general, as the teaching experience of teachers of both groups increases, the level of CT scans decreases. However, this change in CT is not monotonous, but it has a cyclic nature. Initially there is an increase in CT, and after reaching a certain peak, its decrease is observed. This trend of change in CT is noted in both primary teachers and senior school teachers. However, the peak of development of CT is accounted for different periods of time: as for primary school teachers, it comes much earlier (experience of 5-7 years), and teachers of high school later (experience 8–11 years).

3. Data obtained with the help of three diagnostic techniques indicate that there are no significant and specific differences between the level of CT development in the two groups of teachers. There are differences in the dynamics of CT development, depending on the length of service, noted above, and some differences in the strength of the relationship between CT and the effectiveness of pedagogical activity and the degree of influence of CT on the effectiveness of educational activities. But they are not statistically significant.

4. In the methodological plan, the following points should be noted. First, the author's diagnostic technique proved to be more sensitive to CT assessment and its results significantly correlate with the effectiveness of pedagogical activity. Taking into account the specificity of this technique, there is every reason to assume that teachers develop a special professional type of CT, which can be called pedagogical communicative tolerance. Secondly, it can be assumed that a more accurate criterion for the allocation of PCT is the assessment of the degree of the influence of quality on the effectiveness of professional activity, and not its correlation. Therefore, only those qualities of an individual that affect the effectiveness of professional activity should be attributed to PIQ. To diagnose this effect, and therefore, to isolate PVK, one should use not a correlation analysis, but another mathematical apparatus (correlation relation, multiple regression, etc.).

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