

Organization of Teacher-Student Interaction by Means of a Situation Centre

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Abstract

This paper, based on the questioning of students of the Far Eastern Federal University, reveals peculiarities of a problem of teacher-students interaction. The dependence of the degree of the problem on the reciprocal value of students' academic progress was found. The solution to this problem was introduced by creating a situational center explaining its structure and functionality of its services. It was found that a low level of pre-university preparation of students is a key factor of many conflict situations.

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1. Introduction

The problem of teacher-student interaction occupied the leading positions in researches of educational process at all times. Despite a long history, this issue has not lost its relevance even today due to specific features of today's students and teachers. For example, in Russia the new Education Law considers parents of minors students (under 18 years old) as participants in the educational process. This innovation was made in order to reduce the number of conflict situations, in which students cannot confront a teacher. The inclusion of adults into the educational process allows only partly resolve the issue. In general, the problem remains. Conflicts are an essential, but not the only part of the problem in a teacher-student interacting system. The problem in interaction is determined to discrepancy in information culture of a teacher and a student. As a rule, teachers consider the Internet as an auxiliary source for preparation for classes. But many students do not have the skill to deal with

other resources except Internet ones. Therefore, there is a discrepancy of the level of students' self-training to the level imposed on them by teacher's requirements. On the other hand, the Internet provides access not only to the digitized content of books and textbooks in the native language, but also to the means of scientific databases - Scopus, Web of Science, e-library - scientific articles in top magazines, where the latest scientific achievements are published accessible to those who speak English. Russian teachers on average (except English language teachers) are fluent English speakers, while many of today's students have such tendency. Therefore, it is possible that a student can beat his teacher in the breadth of scientific outlook that again will affect their interaction. This list of advanced features of teacher-student interaction describes the presence of the above stated problems and emphasizes its importance.

2. Portrait of a modern teacher in students' eyes

The outlined problems require solution that definitely involves active participation in the learning process of not only the teachers, parents and students, but the university administration as well. To form students' concept of a modern university teacher we have tested sophomore students studying Nuclear power and Thermal Physics in the Engineering School of the Far Eastern Federal University (Vladivostok, Russia). The questionnaire was conducted within the framework of the international study initiated by the Association of Professors of the Slavic States (Sofia, Bulgaria).

The questionnaire highlighted the first question, in which the students mark the qualities that they would like to see in a modern university teacher. According to the results of the questionnaire, the teacher must be highly skilled in his or her field, tolerant, responsible, able to present educational material, disciplined. The rest of the questions had answers, with the help of which students depicted real-life situations in their interaction with teachers of the university, which made it possible to create a portrait of a teacher of the university.

The questionnaire results are summarized in the table. The answers on the question on creating a comfortable environment by a teacher in the classroom, on the possibility to have a discussion with a teacher and ask questions were divided in the following ratio - 72.5% responded positively, 25.5% negatively. Of course, the feeling of discomfort, unwillingness or fear to ask question creates preconditions for the development of conflict between a student and a teacher. However, all students who gets the high and good grades responded positively to this question, what makes us wonder – whether the discomfort is caused by poor preparation of students and lack of skills to learn?

Using multimedia technology by teachers, demonstration experiments during lectures, solution of experimental tasks, bringing examples from life and linking discussing problems to future profession of students (question №3) was classified positively assessed by 70% of respondents, negatively - by 30%. It should be noted that this 30% includes only low-performing students. Here we notice a similar problem related to absences or lack of skills to perceive the connection between theoretical problems discussed at lectures and their practical application given by a teacher. Poor preparation leads to lack of understanding of given relations. This situation can also lead to a conflict. The fourth question allowed to see students' opinion about teachers' attitude to students. Mutual respect, the establishment of

humane relations between teacher and student was positively assessed by 85.7% of respondents. But 14.3% of respondents said they did not feel such an attitude of their teachers towards themselves. Predictably these 14.3% was low-performing students who, as a rule, were prone to conflict. Students with low levels of self-training are not prepared to fulfill the requirements imposed by a teacher in the classroom. This pattern is confirmed by the answers on the fifth question of teachers' amiability, tolerance and respect towards students. 75% of respondents gave positive answers - all of them are well-performing students, 25% responded negatively - all of them are low-performing students. As you can see, low-performing students do not recognize teachers as tolerant, friendly and respectful towards themselves - they think that teacher can only require.

Sixth question revealed the possibility of participation of students in the discussion of issues related to their future profession and in making changes in curricula. Only 53.3% of respondents agreed to such a possibility, 46.7% - were negative. The problem here is related not only to the interaction of teachers and students, but also to the interaction between students, teachers and university administration. In Russian universities students can not affect the curriculum. For example, students of one of a major of the physical cluster in given University made a request for additional elective hours for the general course of physics. They appealed to the student office, but the staff did not have the authority to solve this problem. Students were redirected to a higher authority – teaching management office, where the decision neither was accepted. Only after appealing to the vice-rector for educational work, the discussion started, as a result of which it was decided to introduce an optional course. The same situation can be seen in the responses to the question about the possibility of selecting additional disciplines students would like to learn, only 20% of respondents gave a positive answer. Most students (80%) responded that they would like to influence on the curriculum, selecting additional disciplines, but they did not have such an opportunity. It is interesting that there is no separation between students' progress in these responses. Some students with excellent and good progress in studying responded negatively. Of course, this problem is actual. Well-performing students with an interest in their future specialty would like to learn additional disciplines, increase the number of hours for some disciplines; in addition, some students have made proposals for changing the time of study of some core subjects. For example, it was offered to read the course of "Neutron Transport Theory" on second year of study, but in the second semester instead of the first.

It should be noted that students' answers on the question about their willingness to communicate with a graduate chair's teachers were 100% positive. That is, despite the emerging conflict situations, disagreement with teachers' requirements, students feel teachers' interest in making students feel comfortable in the educational process. Such a monotonous response demonstrates that negative answer 2-5 to the question was caused mostly by a desire to blame the teacher in their academic failures, and not by the true state of affairs, which indicates that the conflict between low-performing students and teacher might break out at any moment.

The following question highlighted the following categories of students: employed, unemployed, village or town residents, people with disabilities, ethnic minorities and other religions, different sexual orientation, with low incomes. 89% of respondents showed a positive or neutral attitude of teachers towards students of the above categories. Only 11% of students indicated a negative but not

ostentatiously discriminatory attitude of teachers towards students of the above categories. These 11% are working students who's schedules coincides with study. Regular absences cause natural censures from teachers.

Only 36.7% of students responded positively on the question of whether teachers develop students' respect for the needs of others, responsibility, initiative, and so on. Unfortunately, 63.3% of students participating in the survey was not able to give a positive answer to this question. The results indicate that most students do not see the active participation of faculty members in promotion of respect and responsibility in students.

Table 1. The results of students questionnaire "Portrait of a university teacher"

Question no.	Positive evaluation of teachers by students		Negative evaluation of teachers by students	
	Always, Often		Sometimes, Never	
	Total number of examined (%)	Well-performing (%)	Total number of examined (%)	Well-performing (%)
2. Teacher strives to create a comfortable atmosphere for communication, gives an opportunity to ask questions, conduct discussion.	72.5	41.6	25.5	0
3. Teacher uses multimedia technology, demonstrates experiments during lectures, solves experimental tasks, gives examples from life, and links discussing problems to future profession of students	70	38	30	0
4. Establishing of humane relations between teachers and students based on mutual respect	85.7	45.6	14.3	0
5. Tolerance, respect for students, goodwill.	75	50	25	0
6. The possibility of students' participation in the discussion of issues related to their future profession, changes in curricula	53.3	45.9	46.7	
7. The possibility of choosing additional subjects	20	10	80	40
8. Students' desire to communicate with teachers of the chair, school	100	70	0	0
Positive or neutral attitude of teachers towards students of different categories (employed, unemployed, from villages or cities, disabled, ethnic minorities and other religions, different sexual orientation, with low incomes)	89	70	11	0
9. Whether teachers develop students' respect for the needs of others, responsibility, initiative	36.7	30	63.3	40
10. Whether teachers of the university are abler to establish contact with students	100	70	0	0
11. Whether teachers are concerned about students' future	30	10	70	0
12. Whether teachers help students to explore their own strengths and weaknesses	20	10	80	60
13. Teachers use an adequate system of rewards and punishments	50		50	0
14. The examination assessments system matches the requirements imposed to students during the semester	60	50	40	0

This is another very important issue. The difference in the interest of today's students and teachers is essential. For some students it is more convenient to consider teachers' requirements overstated, rather to think about their own responsibility for preparation for classes. The cross-cutting question on the availability of teachers to establish contact with students showed 100% positive answers. Therefore, students positively assess the attitude of teachers both to low- and well-performing students, so the problem comes from lack of knowledge.

Answers to questions about teacher's concern about students' future, teachers' ability to help students see their strengths and weaknesses, were distributed in the positive range of 30% and 20%, respectively. Unfortunately, even well-performing students were not able to give positive answers to

these questions. Of course, this problem needs to be addressed by the university administration. In addition, teachers should take into account that they can motivate students in educational activity. [...] describes how to motivate students to achieve success. There are ways of conducting classes, at which the teacher can motivate students to achieve success, not to avoid failure.

Evaluating the system of rewards and punishments used by teachers in the teaching process, only 50% of students agreed that this system is adequate. Again, all well-performing students noted the adequacy of rewards and punishments. Low-performing, poorly preparing students feel that teachers are not always correct in their assessment.

60% of respondents answered positively on the question about the compliance of the examination assessment system to teachers' requirements during the semester. As in previous cases, all well-performing students agreed that teachers both in the exam and during a semester impose the same requirements. The remaining 40% disagreed student are mostly low-performing.

Answers on many questions highlight the same problem – tendency to shirk the lack of academic skills upon inability or unprofessional qualities of a teacher. Portrait of a teacher, established through the cross (recurring) questions was quite decent and positive, and mostly problems are due to poor preparing of students leading to academic problems, which distort teachers' perception by low-performing students for a number of psychological reasons.

Based on the analysis of the study results it can be concluded that the university administration insufficiently involves in the organization of the system of conflict prevention. Teacher-student interaction cannot be thrown back in the lap of teachers; it must be supervised by a special administrative structure. Even the participation of parents of minor students cannot solve the problem. The next part of the paper describes such university structure developed by the authors - situation center.

3. The role of the Situation Center in the educational process

The presence of complex problems indicated above shows that the relationship between a teacher and a student must be organized and monitored by a special structure. To implement this idea, we propose to establish a structural unit that will be independent from the university administration. This unit will monitor the educational process in real time. Such structural subdivision can be a situational center.

The first service may be information-coordinating one. This service will allow, if necessary, establishing the missing relationship between students and the content of education. For example, assistance in the organization of elective, making an application to academic competition, etc.

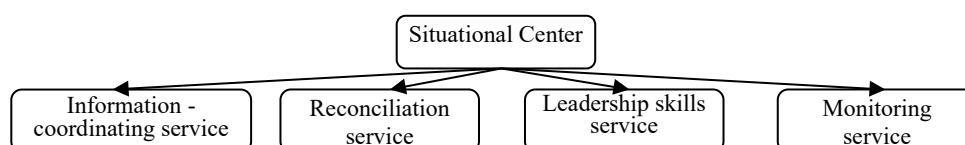


Fig.1. Situation Center structure

The second is reconciliation service. Unlike the previous one, this service supports the relationship between such pedagogical elements of the system as a teacher and a student. As part of the situation center, there must be a secure system of conflicts solution by means of a permanent monitoring of first-year students and, if necessary, with participation of professionals - psychologists. This service is required to have a formed base of conflict situations and resolve methods. It suggests organizing regular training for teachers on the subject of conflict resolution.

A third service - leadership skills service, implying the formation and leadership development. This service is necessary for the establishment and maintenance of missing relationship between learners and learning objectives. For that purpose we are planning to hold training sessions, seminars, courses on leadership development, formation of achievement motive, as well as the organization of student's activities focused on reducing the motive of avoiding failure.

Lack of relationship between learners and teaching processes means there is no relationship management of these elements. At the same time, the University is actively developing the Blackboard Learn system - e-learning platform designed to manage the virtual learning environment. Therefore, to maintain this relationship it is appropriate to organize monitoring service of innovative educational technologies. This service is required to coordinate, support, and accumulate the experience in implementation and verification of data about the innovative technologies used in the organization of the educational process. The service carries out a risk assessment and calculation of the success probability for this or that educational technology. The coordination of innovative educational technologies must involve motivation theory (psychology), theory of leadership (management), situation leadership theory (psychology), and the theory of quality evaluation (qualimetry) that is not considered in the traditional management of the educational process.

4. Conclusion

Thus, based on the held questionnaire we stated the presence of an acute problem in teacher-student interaction. It is shown that the degree of the presence of the problem depends on the degree of students' academic performance. The weaker performance is, the more global the problem. This problem can be solved with help of a developed administrative university structure - the situation center, which has special services for interaction with students and has its own specifics. The Situation Center will combine the management in unusual situations and naturally complement the existing management system. The ultimate goal of creating the situation center is to increase the efficiency and quality of management decisions in the organization and control of the educational process

The main conclusion that can be drawn from the study is the following. Education systems, in particular in Russia, should improve the initial pre-university training to remove the basic contradiction between the level of training of students and teachers' requirements imposed to them in universities.

References

- Gnitetskaya T., Ivanova E. Situation Center in the Modern Model of Pedagogical System // *Conference on Simulation, Modelling and Mathematical Statistics November 22–23, 2015. P. 112-116. ISBN: 978-1-60595-112-6*
- Gnitetskaya T., Ivanova E., Situation Center in the Modern Model of Pedagogical System in the context of physics training in High Schools// *Proceedings of the 2nd International Scientific and Practical Conference « Physical mathematical and technological education: problems and prospects ». Part 2. – Moscow, Moscow State Pedagogical University., «Onebook.ru», 2016. - P. 98-104.*
- Gnitetskaya T. Modern Pedagogical Technologies: Монография. – *Vladivostok. Far Eastern Federal University, 2004 - p. 256.*
- Gnitetskaya T.N., Ivanova E.B., Gnitetskiy P.V., Karnaukhova E.V. About modeling of modern pedagogical system // *Creative house SU "St. Cl. Ohridski "- Kiten. Bulgaria, 2012 - P. 143-148.*
- Gnitetskaya Tatyana, Ivanova Elena B., Kovalchuk N. Achievement Motive and Cognitive Styles when successfully Study Physics // *Procedia - Social and Behavioral Sciences 171 (2015) 442 – 447. 1877-0428, .doi: 10.1016/j.sbspro.2015.01.145Kyrenia, Cypruse.*