

TOLERANCE TO CHANGES IN TEACHERS IN SCHOOLS¹

Olja Arsenijević¹, Ljiljana Bulatović², Goran Bulatović³

¹Faculty of Business Studies and Law, University Union-Nikola Tesla, Belgrade,
SERBIA, e-mail: olja.arsenijevic@fbsp.edu.rs

²Faculty for media and communication, Singidunum University, Belgrade, SERBIA

³Faculty for management, Union-Nikola Tesla, Sremski Karlovci, SERBIA

Abstract: *The aim of this paper is to indicate the need of changing the way of education, from its lowest to its highest level. This need is caused by changes in the way of doing business and by entering the knowledge era. The overview of research conducted in all elementary schools with teaching staff in Novi Sad, in order to determine their willingness to change.*

Keywords: *learning organizations, teachers, tolerance to change*

1. INTRODUCTION

Today, it is spoken about new social agreement, based on rights and responsibilities of citizens, which would renew the social cohesion, as well as the solidarity based on moral order.

Is this a kind of a new utopia? Can our societies harmonize the contradictory requirements of competition and solidarity? Is the human nature capable to initiate and implement such a project? Can education contribute to such civilization progress?

The questions of this kind represent the tendency to find solutions for major challenges and preasures to which contemporary societies are exposed. They reflect preoccupation and concern, as well as confidence in the possibilities of human learning. Due to that, the equation education – citizenship – democracy becomes a field in which the expectations of a very varied public are concentrated: the highest decision-makers, politicians, teachers, instructors, parents, business people, experts in labour relations, civil servants, NGO experts, community leaders, media specialists, experts in youth issues, human rights activists.

1 This paper has appeared within scientific-research interdisciplinary project *Digital media technologies and social-educational changes* that is financed by the Ministry of Education and Science of the Republic of Serbia.

New education way has already become a common aim of education reforms throughout Europe. Many organizations and communities initiate the alternative reform processes that go from the bottom up. Within these spontaneous initiatives, the interesting solutions based on empowerment, autonomy and ownership are suggested. In short, education for the needs of business in knowledge era is simultaneously a current research topic, priority of education policy measures and a field of global interest.

In March 2000, the European Council has adopted Lisbon objectives, which represent the indicative target of EU: „... EU should become the most competitive and dynamic economy in the world, based on knowledge, capable of sustainable and economic growth, better jobs and greater social cohesion.” In achieving this objective, Education Council that consists of the Ministers of Education from member countries has adopted the Report on concrete future objectives of education systems, which was adopted in March 2001 by European Council in Stocholm as Stocholm conclusions. This report represents a framework approach to the policy of national education for member countries on the basis of three objectives:[1]

1. Improving quality and productivity of education and training system in European Union

Education improvement for teachers:

Determining the skills that the teachers should have, considering the change of their role in knowledge era;

Providing the conditions that adequately support the teachers in the adjustment to the requirements of knowledge era, including the training and education before employment and work in terms of lifelong learning;

Providing a sufficient number of the young that enter the education for teaching profession with regard to all the subjects and educational levels, as well as providing the long-term needs of profession by increasing the attractiveness of teacher's position and training;

Attracting the persons that have professional experience in other fields to teaching profession. (Extracted by O.A)

2. Enabling the constant availability of learning to entire population

3. Opening up the education and training system of EU, as the rest of the world does

Due to the pressure of globalization and accession to European Union, Serbia needs to focus on the appropriate development of its own human resources. Therefore, it needs such an educational system that provides the students with general knowledge, problem-solving skills, as well as the experience in their use, ability of communication and ability of using information technology. In order to build such an educational system, it is necessary to evaluate the existing one and to identify the evaluation models for particular professions. Evaluation should be carried out each three or four years (depending on school duration), so that the future generations could get better and high quality knowledge, by the innovated methods and techniques of learning and in accordance with economic development of the country and the current trends in the world.

2. SCHOOLS AS LEARNING ORGANIZATIONS

The term « learning organization » is derived from the idea of organizational learning and modern paradigm according to which the learning does not only develop at individual level, but also at the entire organization level : « It is not achieved by simple training of individuals ; it can be achieved only as a result of learning at the level of entire organization.

« Learning enterprise» is an organization that facilitates the learning of all its members and it constantly transforms itself.» In other words, the most successful organizations will be those that constantly involve their members in the activities of individual and social learning.

Teachers' competencies for the implementation of changes imply:

- The ability to see the problem from student's perspective;
- The ability to observe and accept the similarities and differences between themselves and students and between students;
- Respect for the rights of students and sensitivity to their needs and interests;
- The ability to form controversial questions and to deal with multiple meanings of complex situations in the classroom or in school context;
- The ability to see themselves and students as active parts of local, national and global community;
- Belief that the world can be better and that anyone can contribute to that;
- The ability to integrate own priorities in common framework of questions and values, as well as to act in accordance with students' decisions;
- Willingness to admit mistakes before the group and to lean from mistakes;
- Ability to highlight and openly discuss the problems that are imposed by hidden curriculum. [2]

2.1. Teacher's roles

Such teaching implies new roles for the teacher:

- To put the student in the centre of attention;
- To realize human rights in school context:
 - Advocate for corporative pedagogy;
 - Create a confidence climate within the class;
- To take account of social and global context:
 - Advocate for common approaches to problem-solving among the teachers;
 - Take the role of mediator between the student and its environment;
 - Include all participants as well;
- To innovate the evaluation in education:
 - Develop the evaluation as a way to move forward;
 - Encourage the evaluation that contributes to the formation of personality;
- To introduce novelties in teachers' training:
 - To use new pedagogical approaches;
 - To use new information technologies. [3] It is obvious that new paradigm sets completely new tasks before education. Globalization of the world imposes a democratic way of education, focusing on interculturality, multiconfessionality and interdisciplinarity. In that sense, the most important is to perform changes in educational system, and in order for them to be successful, it is necessary that they are accepted and implemented in the system by all participants: from students, parents, social community, school principals to teachers themselves. Therefore, the reforms of education cannot be done from the top, by Decree of the Ministry of Education. The initiative can come from the top, from

the base, because otherwise it will not be completely implemented. In contemporary new school, the roles of both teachers and students are changing. From subordinate and superior, students and teachers become partners in a common task: winning the knowledge, skills and attitudes, as well as development of desire and understanding the need for permanent education.

2.2. Empirical research

In order to overcome the crisis that marks many educational systems, it should be started from the teachers and not the usual reforms of educational system, without relying on them. In the changes that necessarily need to be developed within the faculty, classes and classroom, at all levels and in all education forms, and by which the weaknesses of traditional teaching need to be overcome, the teacher's role is crucial. Regardless which innovation is in question, significant condition for its introduction to teaching is the teacher, all other factors come afterwards and they are at the second level of significance according to their significance and impact. Besides that, there is a large gap between the teachers' education and various expectations that the teacher should meet through his work, particularly in the aspect of [4]

- Knowledge and skill in the field or discipline that he teaches;
- Linking teacher's role in managing teaching process and success in presenting various teaching contents;
- Teacher's capacity for permanent improvement;
- Teacher's adherence to professional ethics;
- Teacher's ability to introduce and apply innovations and achieve collaborative relations by working in a team. [5]

Having in mind all the above-mentioned, and considering that in this chapter we have also spoken about the changed role of the teacher, we will now present the overview of the research on teacher's tolerance to changes.²[6]

In case of empirical research, we have used the standardized questionnaire from the book « Human Potentials Management » by Sveto Marušić (III revised edition, ADECO Zagreb, 2000). («Upravljanje ljudskim potencijalima» Sveta Marušića (III izmenjeno i dopunjeno izdanje, ADECO, Zagreb, 2000, in Serbian)

The survey covered 1250 respondents employed in schools, aged from 25-66 years, of different education degrees, gender and profession. The criteria which we followed when selecting the sample cover our requirements set when objectives and tasks of research were formed. The sample is, therefore, adapted to analytical needs of this research, it is intentional.

Survey was carried out in elementary schools in Novi Sad. The respondents were teachers, professor, counselors, psychologists, librarians, mediators and school principals. The respondents have filled out the questionnaire by themselves. The investigation lasted about 10 minutes, approximately.

By this survey, we wanted to determine the tolerance level to the changes of the people who work in schools. By the questionnaire, we were determining the tolerance to changes, more precisely, the ability to cope with uncertain, conflict or complicated situations. As the

² Research was conducted during 2010 for the needs of the project Innovation culture as a factor in formation and development of innovation systems, that is co-financed by the Secretariate for Science and Technological Development of Vojvodina; the research was conducted by Dr Olja Arsenijević

tolerance is a set of three basic aspects – tolerance to accepting the novelties, new and unexpected situations; ability of coping with the complexity of a large number of unregulated and incomplete information; the attitude concerning the resolution of ambiguous situations in which decisions need to be made – they were also investigated through the same questionnaire.

Aspect of tolerance to accepting novelties, new and unexpected situations, was examined by analyzing the following questions from questionnaire:

- I would like to live in a foreign country for a while.
- We rather accept what we are used to, than what is unknown to us.
- Persons that live orderly and uneventful life, with no surprises, have sufficient reasons to be happy.
- I prefer the company in which I know the majority, rather than the one where the majority are strangers to me.

Aspect of the ability to cope with the complexity of a large number of unregulated and incomplete information was examined by analyzing the following questions from questionnaire:

- People who live their life by the schedule probably miss what is the best in it.
- Good job is the one in which it is always clear what and how should be done.
- It is more fun to get absorbed in a complex problem, than solving something simple.
- In the long run, more can be done by solving small and simple than big and demanding problems.
- Often, the most interesting and inspirative people are those that act different and original.
- People who insist on yes/no answers, do not know how complicated the things are.
- Directors or lecturers that give vague assignments enable the individual to show originality and initiative.
- The sooner we all adjust similar values and ideals, the better it will be for us.

Aspect of the attitude concerning the resolution of ambiguous situations in which the decisions need to be made was examined by analyzing the following questions from questionnaire:

- An expert that cannot answer all the questions in detail probably does not know much.
- There is no problem that cannot be solved.
- Many of our most important decisions are based on incomplete information.

Result that can be considered as average tolerance is 3, everything below that is insufficient and everything above is satisfactory or exceptional tolerance.

Analyzing overall tolerance to changes, according to the questionnaire that we have used in research, we have reached the following conclusions, which are presented in Table 1:

Gender	Private	State
M	4,08	3,65
F	4,26	4,32
Total	4,17	3,98

Table 1.: Overall tolerance to changes of men and women employed in private and state schools

From these results, we can draw several conclusions:

1. Tolerance of the employees in private schools is 4,17 – which means that it is significantly higher than the average, by 1,17 points, i.e. satisfactory,
2. Tolerance of employees in state schools is 3,98 – which means that is satisfactory, since it is above the average by 0,98 points,
3. The difference is smaller in relation to the gender in private than in state schools, namely, in state schools women are more tolerant by 0,67 points than men, while in private schools the difference is 0,18,
4. We found that there is a difference in toleration degree between men and women and it is in the favour of women. Namely, women are more tolerant; 4,26 : 4,08 in private schools and 4,32 : 3,65 in state schools. Such a result was expected; given that acceptance is a part of female nature.

This high level of tolerance indicates that the employees in schools that were included in the research are willing to change, which is a very significant data, if we have in mind that the education in general is facing with a serious and long process of transformations and changes. With the employees that have such a high level of tolerance, it will not be difficult to conduct the reforms. If, however, we speak about private schools, the tolerance of employees for changes is also very important, because in the market they are left to themselves, and as well as the employees in state schools, they need to be included in reform process and they have to adapt constantly to new generations.

On the other hand, we are not surprised by the results because we have assumed that teaching profession is the one that requires tolerant persons. In order to be successful, each professor needs to learn continuously and follow the changes in the scientific field in which he works.

We believe that it is necessary to say that there are differences in tolerance to changes in relation to the age of respondents. The results have shown the following relationships, as it can be seen in Table 2.

Gender	Age	Private	State
M	25-35	3,93	3,95
M	35-45	4,42	4,12
M	45-55	5,00	5,06
M	55-65	3,89	3,43
F	25-35	4,09	4,18
F	35-45	4,56	4,95
F	45-55	4,93	4,87

Table 2.: Tolerance to changes in relation to gender of employees in private and state schools

As it can be seen in the table, the highest tolerance level have men and women aged 45 to 55, than men and women aged 35 to 45, they are followed by those aged 25 to 35, and the lowest level of tolerance have men aged 55 to 65. The results are what we expected. Namely, it

is totally logical that those employees that are at the end of their careers are the least tolerant ones. They do not need constant adjustment to the environment and cooperates anymore.

The fact that the most tolerant are those that are at the middle stage of their career is encouraging. Precisely this population will be the carrier of changes in universities, development of new curricula and acceptance of the attitudes of new education reforms. This part of the respondents is currently at the middle stage of the development of their careers and they need confirmation and stabilization. Due to the competitiveness among the colleagues, they are forced to improve themselves continuously, because without that the progress in career is impossible. Great tolerance to novelties, ability of coping with complex situations and resolution of ambiguous situation are precisely the characteristics of the people who are at this stage of career development.

Respondents aged between 25 and 35 years show somewhat lower tolerance level, although it is also significantly above the average. Namely, this group of respondents is at the initial stage in development of the career, when they still look for support. According to the results from the questionnaire, we can conclude that they are characterized by creativity and entrepreneurial spirit. It is probably the reason for which they have chosen to work in education. They are willing to learn and improve themselves, because they are aware that there is neither survival nor progress in the profession they have chosen.

Speaking about tolerance to changes, we have already said that it consists of three aspects. The first aspect is tolerance to accepting novelties, new and unexpected situations. Analysis of the questions from questionnaire that refer to this aspect:

- I would like to live in a foreign country for a while.
- We rather accept what we are used to, than what is unknown to us.
- Persons that live orderly and uneventful life, with no surprises, have sufficient reasons to be happy.
- I prefer the company in which I know the majority, rather than the one where the majority are strangers to me.

We have found the following:

1. The women, aged between 25 and 35 (even 6,00), and men aged 35 to 45 (4,75) have the highest tolerance level to accepting the novelties;
2. The men aged 55 to 65 (3,75) and women 35 to 45 have the lowest tolerance level to accepting the novelties;
3. In total, the respondents have very high tolerance level: women 4,71 and men 4,06;
4. Total tolerance level to accepting the novelties of all the respondents amounts 4,50;
5. If we would analyze according to ownership structure, then the situation is following: tolerance level in private schools is 4,11, while in state schools it is 4,49;
6. In the analysis of this aspect, we have found the connection between education type and tolerance level, namely, the most tolerant to novelties are those respondents that deal with informatics, regardless of the title. This is quite understandable, it is considered that tolerance level is changed and improved by learning and endeavor, and that the greatest, most intensive and most frequent changes are precisely in this field.

The second aspect of tolerance to changes is the ability to cope with the complexity of the large number of unregulated and incomplete information:

- People who live their life by the schedule probably miss what is the best in it.
- Good job is the one in which it is always clear what and how should be done.

- It is more fun to get absorbed in a complex problem, than solving something simple.
- In the long run, more can be done by solving small and simple than big and demanding problems.
- Often, the most interesting and inspirational people are those that act differently and originally.
 -
- People who insist on yes/no answers, do not know how complicated the things are.
- Directors or lecturers that give vague assignments enable the individual to show originality and initiative.

The sooner we all adjust similar values and ideals, the better it will be for us.

By analyzing, we have reached the following conclusions:

1. Men aged 45 to 55 (5,37) and women aged 35 to 45 have the highest level of this ability;
2. Men aged 25 to 35 (3,5) and women aged 25 to 35 have the lowest level;
3. In total, the respondents have the high level of this ability and it is: 4,07 with women and 4,62 with men;
4. In private schools, that level is 4,38, and in state schools it is 4,34, almost identical;
5. In the analysis of this aspect, we have observed that the ability of coping with the complexity of a large number of unregulated and incomplete information is at the highest level in case of the respondents of mathematical and programming education (5,60), due to highly developed ability of abstract thinking.

The third aspect is the attitude and ability to solve ambiguous situations in which decisions need to be made, i.e. the ability of solving something that is difficult to solve.

- An expert that cannot answer all the questions in detail, probably does not know much.
- There is no problem that cannot be solved.
- Many of our most important decisions are based on incomplete information.

Analysis has led us to the following conclusions:

1. The highest level have men aged 55 to 65, even 6,66, and women aged 35 to 45 – 6,00;
2. The lowest level have men aged 25 to 35, and it is below average – 2,66, and women of the same age – 2,66, which was expected since those are the people with small life and working experience during which they could not acquire and develop the skills and abilities of solving the problems that are difficult to solve. In addition, it is the generation that has grown up in the period when life was cozy in our environment in which the parents easily fulfilled their wishes.
3. In total, the respondents have a high level of this ability: women 3,93 and men 4,66;
4. In private schools, that level is 4,66, while in state schools it is 4,10;
5. Total level of the ability of solving something that it is difficult to solve is 4;
6. The highest level of the ability of solving the problems that are difficult to solve have the respondents that deal with mathematics and programming.

Referring to the analysis of all three tolerance aspects, we can conclude that tolerance is at a very high level. Differences in tolerance level in private and state schools in which the research was conducted are almost negligible. Such a high tolerance level in all three aspects indicates that the respondents are people willing to change, which do not find it difficult to learn, to change and to adjust themselves to changes. It means that those schools, which were included in research, can, according to the tolerance level of their employees, freely start build-

ing organizational culture of learning organization, because one of the main requirements of this culture is readiness for change.

3. CONCLUSION

The research that we have conducted in elementary schools in Novi Sad has shown that teaching staff is absolutely ready for the changes that are suggested for the education system. Extremely high tolerance level that is shown by the teachers is good starting point for the implementation of reforms. In addition, this research also points out that schools are possible to be made learning organizations, since for the permanent learning, the high tolerance to changes is also necessary, especially to that segment that refers to acceptance of the new and tolerance to situation's complexity. Very high indexes at all three levels that are included by the questionnaire, provide a more tranquil school beginning, because in a way it guarantees a partner relationship between teachers and students. As the tolerance level is not fixed, it is obvious that it is increased and improved by learning and desire, for those who want to change, of course. This is encouraging, because it indicates that tolerance level with respondents can be increased much higher. Of course, it remains as an open field of the research to examine greater population of the teaching staff in Serbia, or at least in Vojvodina, to determine the other elements that are important for the success of reforms, as well. In addition, it would be interesting to examine the teachers at high schools and universities, because such reforms are necessary at all education levels, from pre-school to high education institutions.

BIBLIOGRAPHY:

- [1] Savet za obrazovanje, „Radni program”, mart. 2002., <http://ue.eu.int/pressData/misc/69810.pdf>
- [2] K. Duerr, V. Spajic-Vrkas, I. Ferreira Martins, Strategies for Democratic Citizenship, Strasbourg, Council of Europe, 2000.
- [3] Teaching Guide to the European Convention on Human Rights, Strasbourg, Council of Europe, 1997.
- [4] Arsenijević, O. „Evaluacija obrazovanja za menadžment”, Zbornik radova „Na putu ka dobu znanja”, Sremski Karlovci, 2008.
- [5] Đukić, M. „Didaktičke inovacije kao izazov i izbor”, Savez pedagoških društava Vojvodine, Novi Sad, 2003.
- [6] Marušić, S. „Upravljanje ljudskim potencijalima” III izmenjeno i dopunjeno izdanje, ADECO, Zagreb, 2000