The change, as a rule for the background transformations, has emerged in all the domains both on a scientific and practical plan. The change is triggering a permanent adaptation of the system of objectives and requires well known knowledge of the socioeconomical realities. The main modalities of implementation of the change at a macroeconomic level, proved to be the achievement of changes within the present legislation, the elaboration of judicial norms and documents which should stimulate the creativity, the financial support to promote the transfer of technology, intelligence, know-how in all domains; the providing of a infrastructure which to stimulate creative activity and to proceed to some transformation in the educational system of our country.

The paper treats the change management throughout the national priority - education.

We tried to point out the main ways in which a successful change management can be achieved, starting with an analysis of the organization, going through the characteristics of school organization and in the end showing how a successful implementation can be done. We also realized a research, referring to the attitude of didactic population regarding change management a research made from two studies, a qualitative and a quantitative study. The quantitative study used a sample of 384 persons, and the questionnaire was made out from ten questions from which three are identification question.

Key words:

change,
implementation,
creation,
system,
study.

JEL Classification: M38.

#### 1. Introduction

Studies regarding organizations can be realized with the help of organizational and managerial psycho-sociology. Organizational and managerial psycho-sociology analyze the principles of organizing and managing the organizations, the principle pointing out what is essential, fundamental and universal, available in all types of organizations.

Organizational aspects of life determined the construction of some independent relationship between the organizational system and personal and interpersonal systems.

Organizational psychology is a synthesis science that includes managerial psycho-sociology and lives at the intersection of psychology, sociology and management. If we analyze the organizational behavior in schools among psychology, sociology and management there will be included also the educational sciences, especially pedagogy.

The organizations can be also analyzed as a social system in which we can see interactions for the satisfying common goals. If we analyze the organizations as a social system, its main characteristics are:

**MAIN ASPECTS** 

THE IMPLICATION

**OF CHANGE MANAGEMENT** 

IN EDUCATIONAL SYSTEM

**REGARDING** 

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- Open system, as it underlines the idea that the organization is a component of a bigger system, and by managing it integrates itself in other systems;
- Dynamic system, and by that we mean the evolution and its viability that are determined by the changes in the system when we talk about its relationship with the environment;
- Probabilistic system, relatively stable because the elements are articulated with numerous connections, organization being able to function within some limits;
- Auto-setting system that has the ability to handle

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different kinds of influences from the exterior and interior throughout the decisions adopted by management.

All kinds of organizations and scholar institution have more common points then differences, so psycho-social theories about them can be reunited in a more general theory that allows an analysis of an organization.

Common aspects regarding scholar organization are reflected in:

- Self-protection need, by reuniting for a common scope that can exist on a determined, long or short period of time. By instance, private schools have a permanent fight with the instable environment and have to find means to survive in confliction situations. The need of education, in a permanent growth, nationally and internationally, makes a good argument for the classic school to survive;
- Relationship systems between groups, that can cooperate or confront, with strong influence on the power of some or others;
- The existence of some activities, strategies and periodic evaluation regarding the management process at pupils' class level and at school level.

School organization is made by the common work of some people in order to satisfy the social needs, receipted in the informational horizon of those who are implied.

The school is a social organization that determines for their employees awareness regarding their existence as trainers of personalities, and awareness regarding the utility of the educator's actions in socializing.

It's well known that in Romania, after 1989 there has been initiated an educational reform meant to lead to it's adaptation to economical and social changes, but the situation remained the same, because of the budgetary restriction and the absence of political determination and experience regarding the alternative administration structures. The efficiency of managerial processes in educational institutions is determined by the quality of human resources and their labor conscription mainly depends on knowing and applying their knowledge. This assumes the possibility of understanding characteristics which it identifies with, the analysis of organizational structures in the educational area, knowing the relationships between its components, knowing the role, competence, task and responsibility which every teacher has. With the object of knowing the impact of educational management on the didactic population, in this case the Resita school didactic personnel, it has been made a research appealing to the interrogation of this population with the help of a questionnaire that contains questions connected by the main activities of the most important institutions in the educational system. This investigation is very important for the decisional factor in order to understand the population's attitude regarding the educational area, because the educational manager has to take care about the population when fundaments institution's objectives. Researches and studies in this

area has been made, but they concern the efficiency of human resources in the educational system and they have been connected to the professional training of human resources, the quality of the administrative matter, the capacity of the educational institutions to resolve the tasks in good time, admitting that there is a problem regarding the intercourses between the educational offer and the need of the labor market.

The educational manager has to be continuously aware of people's attitudes about the educational area, in order to improve the relationship between the educational area and the labor market. The positive outcomes are the propagation of efficiency while the negative outcomes mean higher costs in training the human resources. Because of these, in the future, the educational manager has to focus on people, as investment in people makes the institution efficient.

## 2. Implementing Ways of Change Management in the Educational System

The current period is characterized by numerous and intense changes in all area, from the scientific plan to the applicative area. That's why the changing has become a rule throughout the producing of the mutation to stability that represented a primary objective only a few decades ago.

The English specialist Kurt Lewin explained the issue of changing throughout the force area, considering that the change is a dynamic equilibrium of some forces that on one hand sustain changes, and on the other hand determine the resistance to changes, actions that take place in three steps:

- The opening, the introduction of some new information that allows comparing between the situation that determines the change and the effective situation;
- The introduction of transformations, that allows the cross over to a desired situation;
- The closing, in which it follows the making of the new equilibrium in the system with the help of law, culture and structure.

Changes determine a permanent adaptation of the system to the new conditions. The main way of implementing the changes in macro-economic level have proved to be the following:

- The making of some modification in law frame and elaborating the laws that simulate creativity, innovation and individual and group initiative. Main resources implied are: human resources and informational resources, which offered the possibilities of knowing the way of structuring the law, existent in other countries.
- Assuring of financial support in promoting the technology transfer, of intelligence transfer and know-how in all areas. The government has supported the knowledge promotion throughout

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credits, and other stuff. International organizations, in many assistance programs, have favored the creative frame through out knowledge transfer in different areas. Implied resources have been the human, the financial and informational ones.

- Assuring of infrastructure that stimulates the creative activity and applying the results of this. The creation of national centers to detect the creative potential population and the support of those are continuously in the view of the Government, essential in this case being the human, material and financial resources.
- Making of some mutation in educational system in our country. In mutation system, national priority is education, based on realization of the educational ideal on humanist tradition, on the value of democracy and on the Romanian society aspiration contributing to the keeping of national identity.

In the Romanian school, the educational ideal is the free development of human individuality, by forming autonomy and creative personality.

The finality of education is forming of human personality through out:

- Assimilating the scientific knowledge of national and cultural values;
- Forming the intellectual capacity, the affective abilities and practical abilities by assimilating humanist, scientific, technical and esthetic knowledge;
- The assimilating of intellectual work techniques needed for training and self-training during lifetime;
- The education in the respect of human rights and fundamental liberties, of dignity and tolerance;
- Harmonious development of the people through physical education, hygienic and sanitary education and the sports practicing;
- The introduction of the sensitivity regarding the human issue, regarding the civic values, and the respect for nature and the environment;
- The professionalizing of the young generation in making some useful activities, those are able to produce material and spiritual goods.

These Romanian school finalities can be realized through strategies' instruction and education by modern techniques sustained by education and school practices, according to every education level imposed by the change.

The state promotes the democratic learning principles, the principles of permanent education, and assures the right to different types of education based on educational pluralism, for the individual and the entire society.

The current learning system is mostly financed by the state, the legal frame being large, adapted to the macroeconomic mutations, being able to be sustained by scholarships, study credits, taxes, donations and other legal sources.

As a way to implement changes at national level, the Ministry of Education and Research has approved the creating of post-university learning system, in the superior learning system area in which function studies of master, post university studies and PhD studies.

The Ministry of Education and Research defines objectives and coordinates continuous formation, evaluates, and finances the continuous formation programs, including the professional conversion, realized in:

- Superior learning institutions, in faculties, departments;
- Superior learning institutions, in departments for training the didactic personnel;
- · University college;
- Training centers
- Others.

Starting with the necessity of growing the flexibility way of the people regarding the appeared mutations in all areas it imposes the urgent modernization of the structures, research methods and techniques, educating and even the making of some strategies and management policies with a pronounced creative character in all areas.

In order to support learning and educate for understanding the changes effect and for group participation in implementing these, there have been introduced new disciplines, many optional disciplines in new areas of study, specializations adapted to the changes needed.

The elaborated materials and realized courses have been conceived in a systemic vision based on methods and high concepts for the treating of the changes' issue in the context of the Romanian realities.

The adapting of all system at the new development needs, assumes the profound knowledge of the changing realities, the implication of social factors in organizing the information and the use of the methods of analysis, interpreting and using information, using the decision-making methods and not at least the basic and complementary financing of the learning system and education.

The principles that fundament the base of political changes must allow the maintaining of the economic, social and politic equilibrium for the general system in change to have an active and positive role in all areas. The basic principle of these policies is the compatibility with the government policies.

It imposes the creation of a favorable climate for the change regarding the preparing of the personnel for obtaining some favorable attitudes for implementing the new, constructive and optimal dimensioning of creative groups, organizing the creative groups, analyzing the activities, assessing the activities.

 a)The preparing of the personnel for obtaining some favorable attitudes for implementing the new, should be realized by:

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- Encouraging the employees;
- Encouraging the group members to freely express their ideas;
- Encouraging communication;
- Encouraging failure;
- Introducing the system of compensations;
- Recruiting, hiring and promoting the creative personnel;
- Creating the optimal condition for the ideas of employees.

b)The construction and optimal dimensioning of creative groups

The superiority of the group creativity against individual creativity is well known by the specialists, mainly because the group reunites the creational potential of all group members.

The main advantage of integrating the specialists into the group is the possibility of materializing all informational connections, which assume unlimited change of information.

- c)Organizing the creative groups. The main aspects that should be taken care of in organizing the creative group activities are:
  - Knowing the purpose for which the group was created;
  - Making a hierarchy of the roles and positions in the creative group;
  - The implication degree;
  - Establishing the independence degree;
  - The delimitation of the main communication ways in the group

d)Analyzing the activities, taken into consideration must be:

- The implication of the creative groups;
- Structuring and dimensioning the creative groups:
- The nature of the climate within the creative groups.
- e)Evaluation of the activities. We consider that the evaluation can be done in two phases. The first one, the partial or initial evaluation, when the obtained results in applying the proposed solution by using the creativity methods. The second one is the final evaluation that estimates the influence that group activities have over the efficiency of the organization.

The implementing of the changes' process by pointing out the creative aspect of the management at micro-economic and macro-economic level is complex and will last long showing the preparation and culture level of the personnel in organizations.

That is why we need mutation in the educational system that affects all personnel, and the concentrating of many specialists over the individual creative mechanism and group creativities.

Creativity as a process, assume the taking into consideration of some elements that are characteristic to human nature, and those elements are:

 Receptivity, sensorial and psychological, that allows people to see more clearly what happens around

- them and to have a mental ability not to allow the censoring of their ideas;
- Concerning, meaning that the creative people do not tolerate disorder, assuring that ideas and information that are taken care of in their process are of high class;
- Conceptualization, the people are able to construct conceptual concepts that allow the setting up of simple relationships with multiple connections where other see confusion;
- Interdisciplinary ability, that must allow a cross fertilization of the ideas and conceptions in order to make possible intelligence, for the creative minds to see the resemblance of the issues from different areas and to see above the followed objectives;
- Independence, creative people are independent in the way of thinking.
- Perfectionism, that must be imposed at exact standards that aligns creative people for evaluating some situations, some persons und others.
- Correctness, which must look for the establishment of a target that people have to point their efforts at, sure that they will succeed by logical arguments.

# 3. Case study: The attitude of the didactic personnel regarding change management

In order to point out the attitude of the didactic personnel regarding change management we resorted to a case study that I made out of two studies. The first one is called "quality study" and it is a pre-study for the second one called "quantity study". Further, we detail how every study was made, and most important, how the sample can be developed.

The quality study consist of collecting and analyzing the psychical and sociological elements that allow the explaining of the attitudes, motivations and the behavior of every one involved in the study.

The questioned subjects are people in schools in Reşiţa city included in a representative sample. A quality study precedes the quantity study because the information obtained is not enough to elaborate the hypothesis.

The results of the quality study depend of the number of the questioned persons, sampling, effective display of the study, and presentation and interpretation of the data obtained. For making a correct sampling we have to list the main criteria and for each criterion we list the possible levels. By listing the criteria and by making a junction between them we have obtained a sample for 72 persons. The questioning of the 72 persons is considered a pre-research done with the purpose of finding out which is the percent of persons who believe that the actual educational system needs to implement a method of change management. According to this percent, which represents the appearing frequency of the studied phenomenon we will determine the size of the sample at the level of Reşiţa city, sample that is used in the quantity study.

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For a better representation we questioned the population of every quarter in Reşiţa city. For this we used the statistical data, more exactly the census undertaken in 2006.

The validation of the hypothesis formulated by the quality study is made through the quantity study. For this we can use two categories of investigation, the census and the questioning. As main steps in elaborating an investigation through the questioning we remind: building the sample, determining the size of the sample, making the questionnaire, administrating the questionnaire, the analysis of the obtained data, making the synthesis report.

The determining of the sample is made different function of polling rate:

$$R = n / N \times 100 \tag{1}$$

R = poll rate

n = studied population

N = mother population

If the sounding rate is less then 14,3% we have the situation of a non exhaustive poll, and if the poll rate is above 14,3 we have an exhaustive poll.

In this case it has been determined a non exhaustive poll, the size of which is given by the relation:

$$n = \frac{t^2 \times p \times (1-p)}{\Delta \omega^2}$$
 (2)

n=minimal size of the sample

t=coefficient that corresponds to the probabilities whom with it is guaranties the results

p=proportion in the sample that possesses the studied characteristic

 $\Delta\omega$ = accepted limited error

The sample used in our quantity study is:

n = 
$$\frac{t^2 \times p \times (1-p)}{\Delta \omega^2} = \frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2} = 384$$
 (3)

### 4. The Presentation of the Questionnaire

Good morning, I am doing an investigation over the impact of change management over the didactic personnel and I am asking you to have the kindness to answer the following questions:

- Do you consider that the actual educational system needs to implement a method of change management?
  - a. Yes
  - b. No
  - c. I don't know
- Which is the context that you consider it imposes the implementation of change management?
  - a. The changes in macroeconomic level
  - b. The growing of efficiency in education
  - c. The alignment of education with the labor market
  - d. Other
- 3. How do you consider that implementing change management can be done?
  - a. Making of some modification in the legal frame

- Assuring of financial support in promoting the technology transfer
- Assuring of infrastructure that stimulates the creative activity
- Making of some mutation in the educational system
- e. Other
- 4. What is the finality of the educational system in your opinion?
  - a. Assimilating the scientific knowledge
  - b. Forming the intellectual capacity
  - The professionalizing of the young generation in making some useful activities
  - d. Finding a job according to the education acquired
  - e. Other
- 5. Which are the factors that can contribute to a successful implementation of change management?
  - a. Decisional factors from central level
  - b. Decisional factors from local level
  - c. Decisional factors from learning unit level
  - d. Others
- How do you think that the decisional factors' support could be materialized at institutional level?
  - a. Law modification
  - b. Financing from government
  - Partnership regarding the obtaining of European founds
  - d. Other
- What skills do you believe that the manager must have in implementing the change management in the educational system
  - a. Creativity
  - b. Flexibility
  - c. Adaptability
  - d. The opening for participative management
  - e. Resistance to political forces
  - f. Other
- 8. Your gender
  - a. masculine
  - b. feminine
- 9. Your age
  - a. Under 20 years
  - b. Between 20 and 29 years old
  - c. Between 30 and 39 years old
  - d. Between 40 and 49 years old
  - e. Between 50 and 59 years old
  - f. Over 60 years old
- 10. Your occupation
  - a. pupil-student
  - b. worker
  - c. intellectual
  - d. public servant
  - e. other occupation
  - f. over the age of work

The conclusions of the study are:

At the question "Do you consider that the actual educational system needs to implement a method of change management?" 87,43% of the questioned persons have



answered affirmatively, this thing maintaining over the criteria of age, gender and occupation.

Asked about the context that they consider it imposes the implementation of change management, most of them, 41,23% have chosen the alignment of education with the labor market, and the respondents belonged to the groups of under 20 years old and between 30-39 years old.

When asked "How do you consider that implementing change management can be done?", 48,31% of them chose the modification of the legal frame, and the respondents belonged to the group of between 20-29 years old, while 11,34% of them considered the other way to implement a change management.

Referring to the finality of the educational system, 58,61% of the questioned persons said that this would be finding a job according to the education acquired , and the respondents belonged to the group of between 20-29 years old, and they were workers, while 4,98% of them considering that the finality was assimilating the scientific knowledge.

Asked about the factors that can contribute to a successful implementation of change management, 62,11% of the questioned persons have answered that there are the decisional factors from the central level, and the respondents belonged to the group of people between 40-49 years old and of people between 30-39 years old, all of them being intellectuals.

Questioned about the support of the decisional factor regarding if it could be materialized at institutional level, 54,13% of those investigated have chosen the law modification, and the respondents belonged to the group of people between 40-49 years old, and they were public servant, and few of them (1,16%) have chosen the "other" way.

Referring to the skills that the manager must have in implementing the change management, 51,84% of the questioned people have chose creativity, the respondents being people of the age between 30-39 and intellectuals.

### 5. Conclusion

Any kind of educational activity must follow the introduction of changes determined at educational level, the level of knowledge, attitude level and individual or group behavior. More then that, education can no longer limit itself at a reactive adaptation, but it will have to obtain an effective proactive adaptability, needed for the existence and development into a society which is changing, in which the anticipation and influencing the environment persist, creating the condition of its own development with a transactional process and achieving performance, receiving skills for situations and contexts not only predictable but also possible.

The manager of the educational institution has to invest in the development and training of human resources, to create an evaluation system of the performance, to offer the personnel development opportunities regarding their careers.

Very important in these days is information management. Information is the one which brings new elements of knowledge about past, present and future. In order to make possible the measuring of performances by management, necessary will be qualitative and quantitative information regarding inputs and outputs.

Hopefully the conclusions of this research will lead to the improvement of the educational system and the next step will be the change management in the educational area.

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