

# Educational Challenges in Reference to Management

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**Abstract:** the changing conditions of the functioning of modern organizations are the basic premise for emphasizing in the article the role of education and science in preparing potential and current entrepreneurs to meet the requirements of competitive struggle resulting from the Industrial Revolution 4.0. The speech emphasized the legitimacy of making and / or perceiving modifications to educational processes, especially in terms of future challenges.

**Keywords:** education, science, management, organization.

## 1. INTRODUCTION

The reality that surrounds us is in constant motion. All processes continue under different conditions. The conditions for the functioning and implementation of tasks by organizations are changing. They become more and more complex, which is not indifferent to the issues related to the conducted activity, the perception of the staff and their role in the pursuit of high performance (task execution). This, in turn, proves that new tasks appear before science and education. They too are becoming more and more complex. They must be integrated not only into the surrounding reality, but also take into account the implications of internationalization of a number of processes, not only related to economic activity. It is therefore reasonable to ask: what are the educational challenges for the future in the context of the current conditions and the forecast of their transformation, both on the micro and macro scale?

The reference to the question posed can be presented in various ways. I consider that dealing with issues only through the prism of educational challenges as a narrowing of the matter. After all, the issues of impact on economic processes and the consequences of the changes observed cannot be ignored, such as what the Industrial Revolution 4.0 brings. or the consequences of the current pandemic. The indicated instability applies to all areas of the functioning of today's organizations. It applies in its entirety to personnel who cannot be treated in isolation; this must be seen in relation to companies and their operating conditions. It should be understandable, because each enterprise is an open system, it remains in specific relations with all its other elements and its environment. This, in turn, leads to the conclusion that nowadays a number of phenomena should be considered systemically, where no link of the signaled architecture can be weak.

Currently, organizations, participating in the process of globalization, create the world economy, which enables the free movement of goods, services or production factors. The simultaneous development of technology results in better and more accurate knowledge of the world, providing more and more information about it,

which makes the world seem smaller and smaller. It is becoming a common market where people, no matter where they live, want the same products and the same lifestyle. Global enterprises must therefore ignore the differences between countries and cultures and instead focus on meeting the universal needs of consumers, of which those aiming at social and social security are of paramount importance. At the same time, individual organizations - at least due to the nature of their activities, scope and scale, have different goals, tasks, problems, difficulties, etc. - are becoming more and more specialized. Nevertheless, they increasingly signal that they are part of the international and national system and integrated into the local community.

An important function in these systems is played by the new understanding of education focused on the implementation of the broad context of the challenges of the modern world. Education is all processes and interactions aimed at changing people, especially children and adolescents, according to the ideals and educational goals prevailing in a given society<sup>1</sup>.

## 2. CONTROLLED CHAOS

Nowadays, the changeability of people's living conditions and the functioning of an organization is something natural. The set of conditions that occur both in the case of a specific entity and its environment is relatively easy to define. The situation is quite different when it comes to determining the interrelationships of individual factors and their impact on specific phenomena occurring in the surrounding reality. Theorists, with the support of practitioners, often try to organize these factors, determine which, how and with what power influences a given organization. In many cases, these attempts are successful, especially when we are dealing with a specific subject functioning in a definable reality. However, when it comes to trying to generalize, the situation is quite different. This situation is due to many factors. This is due to the fact that, in comparison with the past epochs, the current progress of civilization causes that new factors are created (appear) faster and faster, and the scope of their significance changes. The interdependencies between individual factors are also changing. In such a situation, it becomes very difficult to precisely present the conditions for the functioning of today's organizations and issues related to education. It is comforting that this state, sometimes reminiscent of chaos, is increasingly becoming orderly phenomena. This, in turn, creates the conditions for favorable processes to emerge. At the same time, the dynamics of changes increases, and the solutions adopted and the way of carrying out tasks become outdated relatively quickly. At the same time, the aforementioned changes have become more and more innovative, costly, fast and difficult to predict<sup>2</sup>. This has an impact on management, which is becoming an increasingly difficult art, and the correctness of the decisions made is influenced by many details. The decisions made relating to the future are subject to a feeling of great uncertainty<sup>3</sup>. Prediction and planning (forecasting) are becoming more complex, with more and more question marks. More and more often, it is necessary to comprehensively analyze the international environment<sup>4</sup>. There is a need to notice greater uncertainty as to the development trends of this environment. With regard to multinational corporations, one has to adopt a supranational approach to examining a number of phenomena related to a specific organization.

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<sup>1</sup> Okoń W., *Nowy słownik pedagogiczny*, Wydawnictwo Akademickie Żak, Warszawa 2001, p. 87.

<sup>2</sup> Penc J., *Decyzje i zmiany w organizacji. W poszukiwaniu skutecznych sposobów działania*, Wydawnictwo Difin, Warszawa 2007, p. 22.

<sup>3</sup> More: Ścibiorek Z., *Decydowanie podstawową funkcją zarządzania*, Wydawnictwo Adam Marszałek, Toruń 2021.

<sup>4</sup> R.W. Griffin, for particular examination in the global context, recommends considering the challenges posed by the international environment - the economic environment (economic system, natural resources, infrastructure), the political and legal environment (government stability, incentives for international trade, international trade control, economic communities) and the cultural (values, symbols and beliefs), *Podstawy zarządzania organizacjami*, Warszawa 1999, p. 182.

At the same time, it should be remembered that there is no one universal style of management that “works” in all countries. With regard to employees, a number of factors must be taken into account that should make the personnel motivated to work effectively. Among this quite wide range of conditions, the implications of the Industrial Revolution 4.0 cannot be overlooked. These issues must be targeted by those who are responsible for the teaching and learning processes.

Many factors influence educational processes. The phenomena resulting from our presence in supranational structures and the internationalization of many processes have a considerable influence. New conditions for the functioning of enterprises force the need for a different approach to issues related to solving emerging problems; to what results from functioning in a dynamic environment and brings with it the process of global transformation. Today’s conditions force us to adopt solutions that are inconsistent with what we have observed in the past. Today, in order to be successful, it is necessary to skillfully use the achievements of the world of science and flexibly apply the generated solutions in practice. It is necessary to constantly improve the adopted solutions, watch the competition and contractors and look for favorable conditions, especially now, when we have to operate in an international and multicultural environment. It is also necessary to modify the ways of influencing the personnel, rules of work and cooperation. You have to be flexible in the actions you take. It is necessary to skillfully combine and use the achievements of theory and confront its achievements with practice, which we deal with on a daily basis. This is quite a wide range of challenges not only for entrepreneurs. It is also a sufficiently broad set of tasks for schools, universities and research centers.

### 3. WHAT SHALL BE DONE?

There are many arguments that one of the first steps towards solving emerging problems is achieving awareness, creating mental readiness to deal with the challenges ahead. This will enable us to gain a closer perspective on the issues discussed, as well as unlock creativity dormant in people and find potential solutions. This is also what we should do, analyzing the all-encompassing phenomena and drawing conclusions resulting from the transformations of many areas of business activity, and resulting from the global transformation. A quite important comment here, which I will include in the statement: So far, no one has managed to develop a universal method that would guarantee high educational effectiveness. The same is true for companies. Each is different and operates in different conditions, was created to achieve specific goals, functions in a strictly defined environment, producing a product or providing a service expected by potential recipients. All components of a company or enterprise contribute to the success of the whole<sup>5</sup>. Two more facts are worth emphasizing. First, there is a synergy effect in an effective organization. It consists in the fact that the cooperating elements of an organizational system give an effect greater than the sum of all partial effects. Secondly, the organization belongs to open systems<sup>6</sup>, which means that it can “live” only in close connection with the environment. From there, he collects “livelihoods” (money, information, employees, materials and equipment), which he then processes, and the results of his processing activities are returned to the environment: he “sells them” or donates, thanks to which he can renew the used stocks. Some issues arising from global transformation should not be forgotten yet. Currently, distances and time have shrunk considerably, with the simultaneous dynamically developing process of the arrival of various information which, to a greater or lesser extent, affects what takes place in a specific company. In view of the flood of information, a number of determinants related to decision making and their implications change. This is probably why the thesis is quite popular: make it before the mistake. The scope and scale of internationalization changes many procedures, among which - in

<sup>5</sup> Zieleniewski J., *Organizacja zespołów ludzkich*, Wydawnictwo Naukowe PWN, Warszawa 1976, p. 50.

<sup>6</sup> Cf. Bielski M., *Podstawy teorii organizacji i zarządzania*, Wydawnictwo C. H. Beck, Warszawa 2004, p. 35.

the context of this study - very important are activities aimed at increasing competitiveness and transferring the competition to a much higher level.

The not very favorable conditions for the functioning of today's companies require the use of various forms and methods of influencing the environment and skilful use of the conditions it creates. This position should come as no surprise to anyone, because we have to function in very complex conditions, where competition is ruthless. Various methods are used to achieve a competitive advantage<sup>7</sup>. You have to be aware that a competitive advantage cannot be gained quickly. This comprehensive approach requires that many phenomena be viewed in systemic terms, which must include social and moral responsibility for what we do and how we do it. There is no other alternative if we consider economic phenomena in terms of systems, and in particular strategic. It should also be added that the present world is an era of exceptional scientific, technological, economic, political, social, social and moral acceleration. Manufacturing technology, production and consumption structure are changing rapidly. The existing solutions and the way of perceiving phenomena quickly go down in history. At the same time, many important spheres of life do not keep pace with unpredictable changes, which often take the form of revolutionary transformations.

In the context of the issues discussed, it is obvious that the beginning of the third decade of the 21st century, together with the accompanying phenomena, poses new challenges for broadly understood education and organizations. Their conditions of functioning change, and the time of introducing changes and reacting to what is happening is constantly shortened. With regard to the dynamic environment, you have to be very flexible and often you have to give up the so-called tried and tested methods of company management. They have been successful in the past, but do not currently guarantee significant achievements. Nowadays, quality and its management is one of the priorities of every organization.

In the conditions of progressive, at the same time controversially understood globalization, internationalization of business processes, "shrinking" of space-time and the Industrial Revolution 4.0, the success of the company depends on many factors. In the situation of constantly changing realities of the company's environment and changes in their internal environment, the importance of those conditions that are closely related to the competences of employees grows. It is also important who manages the highly qualified personnel and how they understand the phenomena of the surrounding reality. It is important to understand the matters systematically and to be convinced of the legitimacy of taking pro-social actions, which in the conditions of fierce - sometimes ruthless - competition raises specific reflections, mainly because it does not result in measurable and quick benefits.

A moment ago, for the second time, I emphasized the need to perceive and analyze phenomena in terms of systems. I am not the only one who is convinced of such an understanding and solving of contemporary problems. This is mainly due to the fact that each business activity is related to people, the environment and conditions inside the company, as well as those defined as the closer and further environment. In every organization, you need to see all resources and objectively assess strengths and weaknesses. The issue related to the conducted business activity should be considered in many respects. This is in line with the opinion of the European Economic and Social Committee (EESC), whose representatives share the view that if Europe wants to remain competitive in the long term, the need for an environmental dimension must be taken into account.

In this situation, I intend to emphasize what knowledge and qualifications entrepreneurs should have in order to be successful in business now and in the future. It is a kind of a package of expectations for universities and

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<sup>7</sup> <https://www.corazlepszyportalbiznesowy.pl/art/przewaga-konkurencyjna>, access on 8.06.2021.

various types of educational centers (institutions) in the context of specific conditions for the functioning of today's organizations.

#### 4. EDUCATIONAL CHALLENGES FOR ENTREPRENEURS

Today's business conditions are not kind to entrepreneurs. They require the use of various forms and methods of influencing personnel, the production process (production), the environment and the skillful use of the conditions it creates. However, in view of the multitude and variety of emerging problems, it is impossible to generate universal solutions; there is no one prescription and cure for many ailments. There is a constant need to search for innovative ways to overcome emerging difficulties. Various methods and sources of prompts should be used aimed at increasing the efficiency of economic activity, but without prejudice to society. The company's staff as well as the working and cooperative atmosphere as well as the culture of the organization can be of great help in this respect. With regard to educational processes, this means that social issues cannot be ignored when carrying out educational tasks. Focusing only on management issues may "lose" a person - an employee of a specific organization, who will work in a team. In addition, potential entrepreneurs must get the message that managing an organization is now not only about making profits and dealing with increasing international competition, but also about stimulating the organization's innovation and being able to create new value based on the following changes. In striving to achieve a competitive advantage, one must not forget that investment in personnel is the best investment<sup>8</sup>, and employees are the basic resource<sup>9</sup> and, at the same time, a valuable source of all successes of the company, requiring special treatment. The idea of permanent education is related to the idea of an upbringing society where everything creates an opportunity to learn and develop one's abilities and talents. A person subject to educational processes according to this concept may experience the changeability of the didactic situation, he may alternately become a student and a teacher. In this way, education will be able to consciously shape societies and exert a significant influence on the changes taking place in them.

The transformations that are taking place in contemporary education are also transforming the teacher-educator's profession, modifying his workshop and setting him new functions and tasks<sup>10</sup>. In order to keep up with life and respond to the needs of pupils in such a reality, the educator cannot be indifferent to the changes taking place in the methods and techniques of the didactic and educational process. Routine, lack of orientation in the progress of science and pedagogical practice - this foreshadows an inevitable defeat in the teacher's work, not only expressed by a formal evaluation of his work, but above all by a lack of satisfaction and joy in the profession<sup>11</sup>.

In a changing world, only system solutions are a guarantee of success<sup>12</sup>. As a result, organizations are able to operate in parallel for the short and long term, today and tomorrow, both at the operational (growth) and

<sup>8</sup> More: Ścibiorek Z., *Inwestowanie w personel*, Wydawnictwo Adam Marszałek, Toruń 2006. Zgodnie z raportem sporządzonym dla UNESCO przez Międzynarodową Komisję do spraw Edukacji dla XXI wieku, podstawę edukacji przez całe życie, powinny stanowić 4 filary : uczyć się, aby wiedzieć; uczyć się, aby działać; uczyć się, aby żyć wspólnie; uczyć się, aby być.

<sup>9</sup> More: Ścibiorek Z., *Ludzie cenny kapitał organizacji*, Wydawnictwo Adam Marszałek, Toruń 2004.

<sup>10</sup> Cęcelek G., *Rola nauczyciela-wychowawcy we współczesnej rzeczywistości edukacyjnej*, *Nauczyciel i Szkoła*, 30-31 (2006)/1-2, p. 51.

<sup>11</sup> Araucz A., *Twórcza postawa nauczyciela jako wyraz kompetencji zawodowych*, [in:] *Pedagog - jednej czy wielu dróg?*, Pt. 1: *Pedagog w teorii*, ed. by. T. Zacharuk, Wydawnictwo Akademii Podlaskiej, Siedlce 2005, p. 50.

<sup>12</sup> <https://www.sukcesjestkobieta.pl/rozwiwania-systemowe-kluczem-do-zdrowia-i-sukcesu-firmy/>, Access on 8.06.2021.

strategic (discontinuous) level. They need corporate entrepreneurship, business orientation, innovation and operational excellence at the same time. Without creative, entrepreneurial and innovative people, there is no future, and without people ready to work efficiently and consistently, the present does not exist. Entrepreneurs must constantly remember that everyone is connected with other people by a network of mutual relations<sup>13</sup>. There is no other philosophy of approach to the present day, both for entrepreneurs and people engaged in educational activities at its various levels.

As a result of increasingly intense trade, production, financial, investment, service and technological links between countries, the world economy is no longer the sum of individual markets, but has become a system of integrated markets<sup>14</sup>, and this process will manifest itself with even greater force each year. The multiform process of interdependence between transnational corporations and other entities involved in the production and exchange of goods and services is intensifying. There is free movement of capital and goods, modern technologies, information and knowledge. At the same time, which should not be forgotten, globalization (internationalization) stimulates the growth of additional areas and forms of accumulation, new supra-state centers of governance, non-national forms of identity and types of knowledge not based on rationality<sup>15</sup>. Today, as Ricky W. Griffin aptly put it, *we really have become part of a global village and have a global economy where there is no organization completely isolated from the influence of foreign markets and foreign competition*<sup>16</sup>.

Globalization changes the picture of the world and reduces its size. The world is shrinking from a large one to a small one, known to be hostile or friendly to people, but bearing responsibility for them. The world is now racing, driven by globalization and the resulting tendency to compete and change. Entrepreneurs must be aware that the changeability of the conditions of the organization's functioning is something natural. The need for a company to constantly adapt to a changing environment, sometimes even revolutionary, is not a favorable phenomenon for the durability of the solutions adopted. The conditions of competition are becoming more and more difficult - globalization and the accompanying diversity are changing the existing rules of the game<sup>17</sup>. Currently, management, which is becoming an increasingly difficult art. This state of affairs directly translates into it should be reflected in the curricula and education.

One of the most important features for entrepreneurs is flexibility<sup>18</sup>. This is a distinguishing feature that cannot be learned during didactic classes. Such a feature can be acquired during direct business activities. Moreover, it requires a perfect knowledge of the operating environment, where even local nuances play a significant role. The knowledge of the law, which is constantly changing in our country, is no less important. Representatives of various industries unequivocally indicate that a good entrepreneur is a flexible entrepreneur, able to take advantage of any situation (circumstance). Such a position results from many reasons, mainly because of the divergent translation of the consequences of global transformation.

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<sup>13</sup> The organizational climate is a concept that is interpreted in various ways. In general, this concept denotes the content of social relations that shape the behavior of employees in the workplace, and the social processes occurring in each organization reflect its collective consciousness, value system, assessments, customs, and norms of conduct. At this point, it is reasonable to emphasize that the concept of organizational climate (understood as organizational climate) is used interchangeably with such terms as: organizational personality and organizational culture. These concepts are often equated, and yet there are a number of arguments in favor of delimiting these concepts.

<sup>14</sup> *Globalizacja. Mechanizmy i wyzwania*, ed. by Liberska B., Polskie Wydawnictwo Ekonomiczne, Warszawa 2002, p. 31.

<sup>15</sup> Scholte J. A., *Globalizacja*, Wydawnictwo Humanitas, Sosnowiec 2006, p. 9.

<sup>16</sup> Griffin R. W., *Podstawy zarządzania organizacjami...*, loc. cit.

<sup>17</sup> Cf. Kuc R. B., *Zarządzanie doskonałe*, Wydawnictwo Oskar - Master of Biznes, Warszawa 2008, p. 422.

<sup>18</sup> Cf. <https://poradnikprzedsiębiorcy.pl/-cechy-przedsiębiorcy-czy-nadajesz-sie-do-prowadzenia-biznesu>, access on 6.06.2021.

The rapidly following changes to the rules of the game (organization functioning) create limited predictability of the order and scope of transformations, their pace, scale of impact and relationships with the phenomena and processes observed so far. More and more often it turns out that the source of the company's efficiency is not so much the ability to solve problems, but the speed of their identification, structuring, analysis and understanding<sup>19</sup>. Therefore, it is necessary to give up the primacy of methods of intuition and personal experience as basic methods in managing a company, and to change the paradigms directing economic activities. You have to cut the umbilical cord and be aware of the operation in a reality saturated with democracy. Each entrepreneur must take into account that the real decision-making situation involves risk, because each decision is made in the conditions of incomplete and uncertain information. For this, therefore, theoretical knowledge and professional experience are indispensable, which can be - at least partially - acquired from people who have been running a business for a longer time. When considering issues related to a complex business activity, one must not forget about the issues related to the perception of people (staff) in the company of a specific entrepreneur. There is no need to convince anyone that this is a very delicate and very complex matter. On the other hand, there are many arguments for treating employees as the company's most valuable capital. This, in turn, creates the basis for the conclusion that a given entrepreneur takes into account not only profit in his strategy, but also purely human aspects, with which he goes beyond the walls of the company. There, however, we often have to deal with divergent expectations, which has an impact on the conduct of social dialogue and its effects.

In every organization, not only people are important, but also their attitude towards the entrusted duties. The tasks and responsibilities that have been defined for the employee are an important factor in stimulating his activity. There are other facts in favor of the need, even a necessity, of a broad humanistic knowledge, including that of organizational behavior. We cannot forget that entrepreneurs are socially responsible, even if they allow employees to co-decide about the enterprise during internal meetings and consultancy. This type of procedure is very important in the process of implementing changes that every company has to deal with and, in addition, quite frequently. Such actions signal that the entrepreneur wants to be wise and strong by the strength of not only his argument. An entrepreneur must also focus on intellectual effort and mature independence of thinking people<sup>20</sup>. Therefore, employees should be treated as individuals with their own honor and dignity, fairly rewarded, stimulated to learning and development, fully informed, strengthened loyalty and attachment to the company, and their life at work should be given value and made richer, so that people can motivate themselves.

I raised some issues with regard to both the company's staff and entrepreneurs. On the surface they are obvious. However, if we analyze the conditions in which we do business, this obviousness appears in slightly different colors. We often observe that it is not so pink (pastel). There are many factors that contribute to this assessment. I have introduced some of them, but I know that it is not a complete set. Despite this caveat, I can say that the principles of running a business (business) and relations with employees cannot be learned like the multiplication tables. This can be interpreted differently. In the context of the issues raised by me, it should be noted that theory must be taken into account in practice. A practice that is not always in line with the theory (science) should be analyzed. This means the theory has a twin sister, which is practice.

The school or university equips its graduates primarily with theoretical knowledge. Even if there are hallmarks of practical educational projects, they usually have a small dimension, often detached from reality. In part, this should be understandable, as the conclusions from the practice (life) usually reach the university after some

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<sup>19</sup> <https://poradnikprzedsiębiorcy.pl/-cechy-przedsiębiorcy-czy-nadajesz-sie-do-prowadzenia-biznesu>, access on 6.06.2021

<sup>20</sup> Bolesta-Kukułka K., *Przedmowa*, [in:] M. Crozier (ed.), *Przedsiębiorstwo na podłuchu*, Warszawa 1993, p. 9.

time and in many cases are no longer valid, which is mainly due to the signaled changes in the rules of the functioning of enterprises. Such a situation allows us to state that in many lecture halls historical knowledge is dominant, not fully corresponding to the present reality. It also does not always correspond to what is related to the search for the ideal entrepreneur and manager.

Currently, achieving success depends on many factors. How to present them? According to what criteria? This cannot be done within the walls of the university. Moreover, we must take into account the subjectivism of each academic teacher. On the one hand, it is a positive phenomenon. On the other hand, especially if we take into account the modest number of hours devoted to individual subjects and the difficulty of complying with all the outlined goals of education, the mentioned phenomenon is not very favorable. Thinking ahead, you can already emphasize here the need, even the necessity, to verify the acquired knowledge during your business activities. However, this solution also has quite a significant drawback. Life proves that quite often this confrontation has not very pleasant consequences for a particular company; entrepreneurs pay too high a price for learning in a living organism - their enterprise.

Opponents of these observations may argue that a significant part of the so-called young entrepreneurs are successful. This is true, but when analyzing this group, it is not difficult to conclude that it is not homogeneous. Some entrepreneurs take action and succeed by implementing the strategy of short-term profit. As life (practice) shows, this can rarely be achieved without violating moral principles; whoever takes an economic initiative has to invest a lot, take care of the quality of products, provide the company with legal security, respect tax law and a number of mechanisms and rules of economic life. It is indispensable to integrate into the environment - the company's operating environment - without any conflicts. You need to take into account not only issues directly related to the company's operations, but also issues related to the local labor market, environmental issues, etc.

Yet the real great "captains" of entrepreneurship embody the ideal of the free managerial profession; independently caring for their good name, they want to respect the requirements posed by professional knowledge and the related ethical awareness. Such people strive not only to fulfill their mission in their enterprise. The opinion about professional skills, also about perceiving social issues, is of direct strategic importance for them. Acting pro-social and noticing the whole complex spectrum of matters, they are not interested in a courtesy opinion, for this group of entrepreneurs the superior category is building their own image and image of the company. Not only economic effects are important, but also the perception, in the long run, by the environment and the population there. Can it be learned at the university, from academic teachers, the vast majority of whom do not run a business? In turn, the observations made and conclusions drawn on this basis have a specific value. However, the question arises: is this value adequate to what reality serves us - what will graduates meet as entrepreneurs?

Business schools are expected to be places where prospective executives learn to become leaders and managers. However, the reality is quite different: students are taught a multitude of theories and the appropriate dose of well-known business facts based on practice and case analysis, enriched with current news from various types of management gurus. Sometimes it even gets the impression that business schools are nothing more than giant "prayer houses" that constantly repeat the mantra of economic growth and success. In this respect, Henry Mintzberg is absolutely right in saying that it is not possible to create a manager in a classroom<sup>21</sup>. Since I mentioned the captains earlier, it is practitioners who should be seen as those who will show you how to

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<sup>21</sup> Mintzberg H., *Managers not MBAs: A Hard Look at the Soft Practice of Managing and Management Development*, Berrett-Koehler, San Francisco 2004.

lead a boat to a safe harbor - avoid failure and be successful. The achievements of science can be of great help in this regard.

In education, science has a lot to do. It is an autonomous part of culture serving to explain the functioning of the world in which man lives. One more fact is worth emphasizing - science is built and developed only with the help of the so-called the scientific method or scientific methods, also called science paradigms through research activity leading to the publication of the results of scientific inquiry. As a result, it is the totality of human knowledge arranged into a system of issues, expressed in true judgments and assumptions<sup>22</sup>. In the context of the approximate operating conditions of today's companies, it can be stated that there are still new tasks and challenges ahead of science. Life provides excellent and complex material for scientific activity, for generating solutions friendly and helpful to entrepreneurs and managers.

## 5. THE ROLE OF SCIENCE IN EDUCATION FOR THE FUTURE

Science plays a special role in managing today's organizations. Thanks to the generated solutions, entrepreneurs receive a package of specific proposals, usually resulting from the conducted research. The word "proposal" used in this case is by all means valid. In the context of the previously approximate conditions for the functioning of the organization, it is impossible to directly develop a universal recipe for a given company (institution). It is entrepreneurs (managers) who have to confront their suggestions with the realities and their own professional and life experience. These hints of science can be used to make decisions, primarily aimed at increasing operational efficiency. It must be remembered that science and business (management) are about something completely different: business is about making money, and science is about finding out the truth (not always for a lot of money). One more fact is worth emphasizing: science - these are theories often detached from reality, and business - life is firmly embedded in reality.

The increasing complexity of activities requires anticipating the long-term effects of decisions made. Therefore, these decisions cannot be put off at the expense of ongoing activities. Therefore, there is a need for a balance between orientation towards the present and the future, which is directly related to the current situation. This means that in times of rapid and unforeseeable changes, particular attention must be paid to the future. In addition, access to the achievements of science and the ability to consume its achievements are indispensable.

Research and development environments provide practitioners with a lot of information. They can be successfully used to carry out changes which are a necessary factor for the survival and development of any organization; an element that should be constantly taken into account not only by entrepreneurs. Science dictates that it is imperative to abandon the present state of affairs and move towards the desired goal, while accepting the transition state. However, on the other hand, when determining the need for change, one should take into account the stage of the organization's development and not take action until all the efficiency growth reserves contained in the current solution have been used.

The conclusions from a number of studies clearly say that only a reliable assessment of the state (condition) of an organization should be a rational premise for a possible modification of the existing reality. Only then will it be possible to identify the need (necessity) of another transformation from a stabilized state. However, it should be taken into account that changes are present in our lives regardless of individual preferences and

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<sup>22</sup> *Słownik języka polskiego*, Wydawnictwo Naukowe PWN, Warszawa 1979, vol. II, p. 300.

should not be something that could surprise us. One more fact cannot be omitted, which is the need to react quickly and be constantly ready to change.

It takes time to see all the aspects of your business. First of all, you have to be willing and be able to think in perspective, in strategic terms. Currently, many phenomena should be seen much more broadly. It is a necessity to keep up with the faster and faster tomorrow. Each enterprise is supposed to function in terms of a system. It is still supposed to be an orchestra that plays well, with no place for unsuccessful musicians or false notes. You need to skillfully and patiently create the foundations for building social and economic values. In order to survive, companies will have to abandon the old management habits (rules) and, in their place, develop new methods of functioning - go beyond the limits of the existing stereotypes. For this to happen, entrepreneurs must first want it, which again emphasizes the need for them to have extensive knowledge and qualifications. It also emphasizes the need for continuous education and permanent looking into the future so as not to be surprised by the situation.

Science generates conclusions for practice. In the context of the issues discussed, it should be emphasized that an enterprise has a different impact on the social and cultural environment in which it is located. In this case, social dialogue and social responsibility take a special form, usually it has a broader dimension. The environment in which the company operates cannot be exposed to negative consequences resulting from the activities of a specific company. First of all, it refers to issues related to keeping previously made social declarations, especially at the time of entering the market and recruiting employees. Society cannot feel ripped off. If there were promises from the entrepreneur, they should be fulfilled. Likewise for the staff. A businessman's word should be of great value, and he himself should be credible in all areas of his business. For the local community it cannot be a nuisance from which it will be difficult to get rid of for many years. Therefore, in all situations, care must be taken to be legible to the environment, which is strongly emphasized by the results of a number of studies, not only national ones.

The theory and practice show that if the signaled demands are met, creativity, assertiveness, entrepreneurship and initiative will become the hallmarks of a contemporary and future businessman. However, the role of entrepreneurship will also change and the philosophy of entrepreneurship itself will also change. This will have an impact on the competences of entrepreneurs, which must be constantly developed and improved. It is also important for the entrepreneur to be a special kind of scientist who knows the research methodology, especially in relation to his company and the phenomena resulting from the social dimension of its operation.

## 6. FINAL CONCLUSIONS

The dynamics of social, cultural and political transformations taking place in our country is also reflected in the educational reality, causing the reorientation of institutions dealing with the education and upbringing of the young generation of people, and then the staff of a specific organization. Due to the new challenges, education is required not only to optimally prepare the pupil to use the achievements of civilization, but also to prepare them for creative participation in the processes of its further development. It also means that the concept of education as a simple adaptation to civilization living conditions may not be enough and that education is needed, thanks to which people will be able to manage the processes of civilization development. Education should also prepare for professional mobility, so it should, by providing a solid basis of knowledge, create the basis for acquiring various qualifications, educate cognitive abilities, stimulate creativity, develop understanding of scientific principles and the ability to apply them in practice, and develop the necessary moral principles. Once acquired knowledge will not make it possible to meet the constantly changing requirements of our times, education acquired in the school system gradually becomes obsolete. At present, it is no longer

enough for an individual to accumulate a reserve of knowledge in his early life, from which he could then draw indefinitely. She should be able to use all opportunities throughout her existence to update, deepen and enrich this basic knowledge and to adapt to a changing world. Hence, so much emphasis is placed today on the education of tomorrow, understood as shaping readiness to meet the future, as well as conscious shaping and creative, active planning of this future. Education of our time requires a shift from a traditional school focused on the present and the past to a school focused on the future, aimed at preparing young generations for life in new, changing conditions.

Many factors influence the education of the future. In view of the multitude of possible implications arising from the process of global transformation and Industrial Revolution 4.0. one universal method (manner) of outlining challenges for education cannot be presented, especially in the context of preparing (educating) an entrepreneur. Therefore, this study does not pretend to be a material that will provide people interested in educational issues with a set of perfect solutions. In each case, the procedure must be different, and the wisdom of the representatives of science, teachers and practitioners will mainly consist in reaching the interested parties with specific knowledge in a professional manner. It is also important to enable entrepreneurs to understand the purpose of their actions, because then their identification with what they are doing will be at a much higher level. Therefore, one should carefully analyze the expectations (needs) and strive to satisfy them by using a variety of educational measures aimed at skillful use of the achievements of theory and practice.

Every entrepreneur must realize that stagnation is a sentence on the organization. Now it has to constantly react to what is happening in the environment and to what is happening in the company itself. Each of them has to introduce changes in its system, structure and ways of functioning, and adjust its actions to the changing environment. A properly functioning information system is essential, and with it a number of different types of feedback. You have to notice the people who function in the organization, always participate in the process of change and are subject to the requirements of this process. You have to be flexible in the actions you take. This is because the tried and tested procedures do not bring the expected results and are inadequate to the specific nature of the situation. Therefore, you need to constantly improve your knowledge and prepare yourself for the challenges of the future.

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