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Nr. 1 (7)

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INTERNET ADDRESS: <http://www.akolegija.lt/>

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PUBLISHED SINCE 2012

The journal is abstracted in the international data basis:

Index Copernicus Journal Master List: <http://journals.indexcopernicus.com/masterlist.php> since 2012

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WHAT IS SCIENCE?

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Summary

This article is a result of a deep research on the main core of the science, its main features, instruments and methods, which are used for the better and quality research process. The emphasis is given to the tendencies of contemporary science, its main elements and specifications that enable the deep research on the phenomena of the fast developing world. Also different scientific methods were analyzed in terms of their usage and appliance specifications. Also in the article were described the differences between the propaganda, the independent science and the freedom of speech, which are usually mixed up in the contemporary scientific understanding.

Keywords: science, scientific method, contemporary science, scientific research, independent science, propaganda.

Introduction

The world we live in is a complicated structure full of the complex processes, objects and most of them are still not studied or observed only partly. Moreover, every day we get a new question which brings the variety of alternative answers and thus becomes a cause for a new cognition and new research. The world brings us new challenges and facing them we become curious enough to start a research on them, on the impact they bring and the further development they cause. All that components are a strong reason for a further science development, and in its turn science bring us a deep understanding of the world around mainly using its main instruments – research and analysis. The knowledge which we obtain as a result of the scientific process done above the subject brings us the knowledge as a result. In its turn we can use it for the further development, the science development and maintenance, finally the understanding of everything that is happening around at once and may happen in future. Once we obtain the knowledge we start being an independent individual, having an opportunity to treat and perceive the world around us more consciously and with more understanding.

The article is dedicated to the science, its main objectives and methods, the facets between science and propaganda, as well as journalism, contemporary science development, challenges of the modern scientific development.

During the research, the following methods were used: obtaining information from the variety of sources to achieve an independent view on the topic, the deep analyses and scrutiny of the contemporary science, the descriptive and conclusive overview to achieve the best results of the scientific research on given topic. The goal of the article is to define the main features of science, its specifications and its interaction within the society. The objectives of the article were derived from the article's goal and included such aspects as science definition and its complication within the scientific method, defining the reason why science is mixed with paid research, how science becomes a powerful instrument for commercial units and government and, finally, how science stimulates and plays a role of the powerful background for the world development and society wellbeing.

The contemporary scientific processes, including research one, are facing challenges due to the volatility and inconstancy of the world and new, still unknown issue and factors, which occur every day due to the fast developing contemporary world tendencies. Thereby first of all the history of science and its main fundamental basins should become a main instrument for all the research made nowadays. Secondly, one may include the analysis of scientific methods, which might be the best match to the topic of the research and today's realities. Next, we may draw an exact line between an independent thinking, which may result in the independent science and propaganda and journalism which is often confused with independent processes. Finally, it is important to figure out the contemporary realities of science development, tendencies of contemporary scientific research processes and the challenges, which contemporary science and scientific processes face due to the world's fast development and changes, which occur spontaneously and too often.

Science and scientific method

What is science? The word science in English language is derived from Latin word *sciens*, which also stands for knowledge. In more certain definitions it can be defined as any empirical method that can be applied to any phenomena existing in the world and without any potentially specified or prejudicial interest. In the nineteenth century the meaning of science was further restricted, and it essentially meant what we would today call natural science (Shavelson, Towne, 2005).

During a long period of time of the world and human existence, science was an engine of the development. It brought a methodological approaches and ways of studying the world around us. Starting from the most basic ones, science asks and answers the questions regarding the world around us and how it works, thus stimulating humans to develop the future of the world in a more efficient way. The science gives us both universal and specific approaches on the issues like what is the world, how did it became as we see it today, what influence on the world and our perception of it, what was the world like and how did people perceived it in the past and what it will be like in the future (Denzin, 1973). Answering these questions science uses different methods and even needs being agile in order to see different sides of the world or building a clearer picture using several approaches. Scientists use different kinds of observation, analysis, experiments and tests, diagnostics, logic, dissimulation, interpretation and implementation into the further research or into life.

At the same time it may cause an approach that science is universal and able to give us a qualitative reply to any question given regarding the world and can bring us a universal understanding of the truth (Shapin and Schaffer, 2005). In any times or stages of the scientific development of the world, even today in the era of information technologies and fast world development, science is just a way of the clear identification and determination of the world's phenomenon and processes using an approach that is most closely tends to be a correct one at the certain time using an approach which can observe and explain it at its best for the most clear understanding. So that means that science is a certain and precise as based on the observation, clear and confirmed information or the data, capable of being reproduced, perceived and verified by any other individual. To sum up, science, in its main understanding, has to be approved, reproduced or measured by any other representative of scientific world.

The way we perceive the world from the scientific point of view is conducted using a scientific method. It can be defined as a particular precise way of learning, the way of the cognition using several different approaches that suit the best for a particular object or phenomena in science. Therefore one can conclude the general fact, anything in the world that cannot be verified, analyzed, checked and experimentally tested using the scientific method cannot be considered as a science at all. Moreover, if the object, its features or theory can be measured as a false one, it is already considered as a science.

Long ago, people viewed the workings of nature and believed that the events and phenomena they observed were associated with the intrinsic nature of the beings or things being observed (Ackoff, 2009). Nowadays any object or phenomena, existing or taking place in our world, is taken under the deep review of science with the help of scientific method. And these studies have only those limitations which are covered by our mental or physical edges, which any other day might be changed or widened, thus giving us the wider or another deeper view on the object or the process, even radically changing the core understanding of its features or specifications.

Science as culture can be understood in two ways and forms, both integral parts of society – first in its own evolution and secondly in its accommodation by culture (Donald, 2011).

According to the National Academy of Sciences, anything that cannot be observed or measured or shown to be false is not amenable to scientific investigation. Explanations that cannot be based on the empirical evidence are not a part of science (Festinger et al, 2011).

The specification of science is that every research, or experiment or cognition process in any of its way conducted, brings new layers of information or knowledge regarding the particular object or phenomena in the world. That means that knowledge within science is superposing, updating and complementing previous ones, strengthening the science and covering its weaknesses. In this way the scientific process is becoming strong and reliable way of the world cognition.

The main basics of science are made on assumptions (Fiebleman, 1972). The cognition of the world starts from the understanding and accepting the fact that it is real and exists far apart our understanding or ability to perceive it, but every individual can perceive it using the knowledge and the variety of relevant scientific methods. For more veracity one should use nature factors (or phenomena or processes) for explaining the nature of the world around that means that the instruments should be verified to be relevant and precise according to the nature of the processes that should be explained.

However, we should consider that all the scientific research that is conducted by individual (excluding researches that are conducted using information technology instruments) have to be checked for any inappropriate or inaccurate results as based of the nature of human individuals, there might be a risk of biased and amended perception of the result and the whole scientific process conducted by individual. Any previous experiences or perceptions of the world (or research processes) conducted before may already influence an understanding and further perception of the processes by any individual.

An important issue is that we have to take into consideration that all the scientific definitions or explanation are quite limited as scientific knowledge has a specification of being contingent. Therefore as stated above it has an important feature of being able to be adjusted as individual (scientist) is approaching new research result (either evidence). Moreover, despite the wide opportunities that the technologies are

bringing us today, all the technologies are still limited by the level the science has approached in technology development at the exact moment. As well as regarding the predictions we can make based on the scientific knowledge obtained earlier. One may assume that something is likely to happen in the future based on the observation and analyses made on the previous experience, but still all the scientific explanations and prognoses have only probabilistic character, as cannot say precisely based on the factors that only influenced before or those which were researched on and those which were not based on the limitations of the scientific process at a current point of time.

Nowadays most social scientists conceive of culture, which influences on the science a lot, as something that may at times be difficult to define concretely but which nevertheless is composed of material, and nonmaterial items, the latter typically comprised of beliefs, values, and norms (Hyman, 2005).

During a long history of science and scientific research processes, the certain approaches were formed to make all the scientific more formalized and able to be structured for the catholicity of their results usage. In other words, the particular scientific methods were created and formulated as a guiding lines and frames for any scientific research. Scientific methods are used to minimize the impact extent which is made by various individual (personal), social or any unpredictable or impossible to define the reasons that may occur during the scientific research conduction. In contemporary scientific world one cannot state that scientific method is a strict set of particular actions or procedures as modern cognition requires flexibility, which is crucial for the creative science. Therefore an applicable and valid scientific method cannot be limited only as a set of particular procedures or actions that might lead to the certain conclusion, it also has to be able to be adjusted in case of necessity to efficient the results of the research.

On the other side, the catholicity of the scientific method means that it has the precise components that can be applied to most scientific researches and maintains the improvement of science understanding.

In its core, the scientific method can be defined as a particular and perfective form of creative and critical thinking and usually every next step of the scientific research made using scientific methodology brings a part of enlightenment on the part of the subject of particular process that was previously under uncertainty.

There is no universal structure of the scientific method that could be applicable generally to every purpose of the research conducted but there are some components that could be adjusted accordingly and bring the precise results. Among them are: defining an object or processes, deep and multilateral observation, the research itself (which might be followed by several different elements), creating a responsive hypothesis and deductive predictions out of it, defining the best way to check it using the experimentation, evaluation of the experimentations results, validation and the recognition or publication of the final results. Usually the structure of scientific method stages is:

1. Observation which assumes the process of searching, gathering and assimilating the data (information) regarding on any process, phenomena, object;

2. Formulation of the problem which covers formulating and asking the relevant questions regarding the relevant and valid results of the previous step – observation. At this stage usually scientists also define the hypothesis that are invalid or null, to withdraw them from the further research as they are delivering the unbiased significance.

3. Formulation of the hypothesis, which contains explanation creation for valid and invalid for testing observations. This is a statement made by a researcher that is a working assumption to be tested and proven. It is something considered true for the purpose of investigation (Webster's Dictionary, 1995).

4. Experiment conduction which assumes planning, organizing and conducting the relevant experiments for the hypothesis testing.

5. Theory derivation, which is followed by a complex creation of a statement, made on the basis of the experiments' results and gives the explanations of experiments observations from the stage one and the likelihood (as stated above) for the observations that may take place in the future.

The usage of scientific method within science is defined by the necessity of answering the questions regarding the phenomena or processes, which exist or take place in the world around us and adjust the theories accordingly. The specification of the scientific method lies on the edge, which occurs when conduction of the new research makes brings update or absolutely another results, it induces a formulation of new hypothesis, which will be followed by applying radically another experiment in order to test it. The advantage of the scientific methods approach is that every next experiment performed at the particular object brings new information which endorses the meaningfulness of the theories which were based on the initial question. In science, the «fact» can only mean «confirmed» to such a degree that it would be perverse to withhold the provisional assent (Fischer, 2008).

That means that usually we need to conduct more than one research to provide the full coverage of the phenome or object study, to process the range of the results which are received during conducting the 5 main stages of the research process and to formulate the valid theories which are applicable and relevant to the realities of the world around.

Understanding of independent science and purposed research process

Nowadays when the scientific process is much more connected to the production and industrial practices, it is important to draw an edge between the dependent and independent science for the deeper understanding of the potential instrumental usage of them. The dependent research is usually based on the dependent salary work, which means that the one important feature of science, which is independence, is fading out and being replaced with the main objective – result which takes a form of the revenue, or if to talk simply, money. The research which is conducted on the basis of the salary work cannot be an independent one as has final result goals which lie far beyond the scientific ones and doesn't base on the deep scientific research motives.

Research is a combination of both experience and reasoning and must be regarded as the most successful approach to the discovery of truth (Cohen and Manion, 1994). As long as the motive lies beyond the profitability interest we may speak that the research is being independent and can bring non-aligned, self-standing and uninvolved results. The research which is conducted on the salary based work is a part of the production function as gets an outcome which is aimed on the profitability of the company where the research is initiated, or in another words is sponsored, covered by money and therefore the factor of the financial motivations appears here.

An independent research is situated far beyond the production function as is conducted based only on the scientific interest and until the results are implemented in further practice cannot be measured monetary (commercially).

In that terms we can state that all the national research, like commercial ones, also have an interest behind the conduction. And despite the differences in the government structure's interest, all of them has a specification background and purposed set in advance. Symmetry of interests exists between the funding agencies, including the military, and recipient institutions (industry and universities), which has implications for the dynamics of the government science because it creates a potentially powerful lobbying nexus of parties whose interests are geared to sustaining and expanding government funding (Ackoff, 2009).

All the national search, which is covered by the government, have a funding given on a specific goal to be achieved, so the results here will be measured by the usage of budget rather than real results, the meticulous control of budget usage and all the risks, including the unwillingness to undertake any to avoid any additional budget usage for the coverage in case. Education can be a part of that issue as well. We cannot say for sure that scientific research, conducted within the educational process, is independent, conversely it has a lot of the background aims and purposes that make it being dependent on the results first of all. That usually causes the lack of significance which is brought by the results of the research.

Moreover in recent years the government funding of the scientific research conduction is hiding its political intentions deeply under the demonstrative willingness to maintain science, thus very creatively hiding the political orientations. Therefore the intentions and the aimed results very often seem to be quite realistic, applicable and plausible.

A scientific discovery has the same epistemological status whether it has been funded. Additionally, the government funding affects science in a way analogous to the ways like price controls, subsidies, credit expansion, and central planning affect markets, so it can be assumed that it makes science more unstable and labile accordingly.

When speaking regarding the science processes which takes place within the educational practice, we may say that in that case we deal only with sharing of the scientific practices, knowledge, methods within individuals who cannot be considered as members of the scientific community or participants of real scientific process. Education emphasizes on the importance of science, teaches science concepts, methods but not facilitating the real scientific process which is obligatory independent.

Despite any other aiming activity, either a knowledge acquiring or just a kind of everyday cognition process which might be mixed with identical scientific process, science implies an intensity of its aiming, focusing and a concentration of intellectual efforts. It involves a kind of systematicity that does not exist in casual experience (Fisher, 2008).

As soon as science or a scientific research is not controlled by the government for national purposes (including educational ones) it is independent and can contribute more to the general scientific truth or knowledge, as it was created without any aims or benefit seeking, or, as it might be met through the political practice, seeking for any advantage that might be used as a political or government instrument. As long as the scientist is not limited by any frames within his activity, the knowledge, acquired from the scientific research can be a general scientific truth which is not playing a role of any benefit or manipulation instrument. Until the scientist (or scientific specialist) is seeking for any financial goals, or working under the support or corporative supervision, the science will not be independent and is likely to be called a professional activity, which cannot lead to the independent way of thinking. The support, either a commercial or government interest plays a role of destructive limitations for science, applying serious boundaries to the independent way of thinking,

which usually bring bright ideas which maintain and develop science, but only in case of being conducted independently.

The same issue is faced when we start considering innovations development as a part of the scientific processes. The innovation is a new combination of existing resources according to J. Schumpeter. It includes new products, new methods of production, new sources of supply, the exploitation of new markets and new ways of organizing business (Ferber, Verdoorn, 2016). Innovation can be a kind of new technology or method using a previous one in another way, so can be defined as a driving force of economic development within the world development.

By its nature innovations are complex, having a lot of specifications, limitations or characteristics for the specific suitability within the requirements that were set in advance. As innovation is called for the technology (or any other) improvement, it has a specific aim for an implementation or application to already existing process or object, or initial implementation, but anyway is purposed for a problem or issue solving that need to be improved or changed the way it is done. That creates an understanding of the background presence within the research conducted for the innovation creation, thus moving it far beyond the standard understanding of science which is independent. Moreover, usually the innovation research is made for the specific purpose of the company or government. Usually entrepreneurs and private companies are central players in innovation process, but there is always a room and critical necessity for the government who is providing a legal infrastructure and supplying basic scientific knowledge and basis for the research.

In current days, in most cases the innovations are privately or corporately funded, therefore those who are conducting the scientific research for acquiring the innovation as a result, are seeking the values and monetary benefits which might be main motivation for conducting the research and removing the independence of the research far beyond. The extent to which the researchers are interested in the monetary or commercial benefits is in the inverse ratio of the general scientific meaningfulness of the results for the whole scientific community and human being.

Currently, the economic development and progress is tightly influenced by the development and adoption of innovations. Research on the implementation and diffusion of innovations is done at the macroeconomic level, being based on links established between various entities (Husserl, 1999). On the one hand the commercially driven scientific research conduction is facilitating quicker development of the technologies around us and our world, but yet it is not enriching the science as essentially as when it is done by independent scientists, who are passionate, self-driven and strongly interested in the independent scientific development. It is caused by numerous reasons but the main ones have been the same since the industrial revolution took place in the world history. Since that many existing research on the determinants of innovation aimed at identifying specific characteristics of the firm that might have impact on the process of innovation and / or environmental impact (Kalantzis, 2014).

Science and society relations in terms of modern understanding

In terms of volatility and changeability of the world today, given the globalization tendencies, which sometimes occur unexpectedly, the scientific world faces urgent needs that would have been to improve the cognition and as a result human understanding of the world around. Very often, both, science and technology invention and discoveries have been profitable for society but to different extents. Today in the contemporary world, both science and technology outcomes are applied in a diverse variety of forms, and bring much profit to society, while at the same time their implementations has also led to unpredictable results and consequences for society.

Both, science and technology are able to bring a great contribution to industrial development, to improvement in society and human wellbeing. On the other hand the rapid technological development leads to different kinds of problems, including ecological ones, conflicts of interest, including destruction of the environment, the increasing of the regions development gaps, the critical increase of population's inequality and others. Moreover, as it was stated before, the research for innovations, which is often financed by government or private companies, has only financial goals and motivation background. This leads to a number of critical issues which are emerging in the world and were already described.

Still there are also problems that are connected with the social side of the human being. Unfortunately the dependent research, which is mainly initiated by the government or private businesses, is displacing several important issues that are a featuring part of the modern society (for example in terms of democracy). Behind the financed research there is no independent science, what means that the freedom of speech is no longer a priority within the research processes. In that terms the individuals are losing the freedom of expressing their thoughts and ideas independently being limited by the certain set of rules and action either a methodology of the research for achieving the certain result. Those limitations may have different character, timing, methodological, based on the goal to be achieved. In many cases, government stimulates the scientific

laboring under the certain constraints, often thinking of their funding portfolios in strategic terms (Hillway, 2014).

Furthermore there is one important factor present here – a factor of the intelligent donors' budget usage which limits the instruments, methodic, additional experiments or additional analysis involving into the research process. All this is impossible when speaking about real scientific process, which cannot depend on anything that is chasing the monetary based benefits. In real science, which is independent, the factor of the freedom of speech is always present therefore making the scientific results more genuine, unaffected and efficient for further science development in the global perspective.

Contemporary chasing of the leading positions on the market either on an international political or economic arena causes the reasons why government policy has always been about promoting science and technology in the national interest. The pursuit of knowledge has come second to more temporal understandings of the national interest, usually in military or industrial terms (Kalantzis, 2014).

Another way in which the government is using science as a powerful instrument of influence is propaganda. Even back in 1842 W.T. Brande, writing in the Dictionary of Science, Literature and Art, called propaganda something applied to modern political language as a term of reproach to secret associations for the spread of opinions and principles which are viewed by most governments with horror and aversion (Donald, 2011). The governmental interests and goals, which are quite often used under a meticulous hiding behind the political or economic reforms for the society's life improvement or wellbeing indeed do not have a goal to achieve the high level of life quality but are using propaganda as a powerful instrument of defending their own interests. Stating that the researches within the country and usage of the countries resources (including financial ones), are made for the population's sake, government use this propaganda for obtaining solid and leading positions within the world economy or in the populations eyes. Contrary to that there is a belief that what many call propaganda nowadays becomes a crucial part of that open marketplace of ideas; it is not only inevitable, but may be desirable that there are openly recognizable and competing propagandas in a democratic society, propagandas that challenge all of us – producers and consumers – to wisely sift and sort through them (Husserl, 1999).

In general, both scientific process and research for technology acquiring are connected with the activity which is aimed to cognate the unknown phenomena or processes, create new knowledge with the help of the discovery or radically new laws and principles of nature and further implementation of this knowledge in the technological sphere or society in general. The core sense of the way how science and modern technologies enrich and contribute to society is the process of knowledge creation itself as well as relevant and proper usage and implementation of them with aim to improve the society wellbeing and solve the critical issues that society is facing, especially in terms of the globalization process. In terms of that globalization process and rapid shifting to a society which is knowledge-based, the process of knowledge creation becomes radically important out of scientific or research activity. Therefore the role of science in this process is too important to leave it behind the attention focus.

That means that the definition of science is quite wider than the knowledge itself, as everything that we have around us is created based on science and scientific truth, as science is a main resource for the further development of the world.

The science activity is resulting into the knowledge accumulation and at the same time the process of science should be continuous with superimposing its level and already accumulated knowledge, enriching the previous ones and it shows one of the main features of science besides being independently conducted, a self-sufficiency.

Based on the scientific knowledge, different research methods can be applied in order to acquire technological inventions. During the next stage the technology is finally implemented and starts to benefit the society in a way it was supposed to do and improves human lives and society in general, especially is applied relevantly to the issues which urgently need to be solved or improved. In case the technology is not able to provide the improvement for the society, the researchers are coming back to the powerful instrument of the world development – science and then creating new technologies applying again for the societal wellbeing improvement.

Therefore, societal progress through science and technology requires a sufficient accumulation of scientific knowledge (Popkewitz, 2004). All said above generates a ground conclusion that science is a powerful foundation instrument of the society and the more time the scientific activity is conducted, the more scientific knowledge is accumulated, the more powerful it is, so time factor here plays quite a favorable and important role.

Conclusion

Nowadays the term science is still including the natural sciences research but also includes all the other scientific fields. By its nature science is focusing on the laws of nature, when the technology is a way

of applying the scientific knowledge, which is already obtained, to improve the way we are living. Therefore, the technological progress is absolutely impossible without scientific knowledge background and vice versa, without technological development and applying we may not have any powerful instrument for further research and science development.

Still both science and technological development are playing quite crucial roles in human lives and the development of both is radically quick. Although they are not able to give us an answer regarding all the phenomena that surround us in the world, still they maintain and facilitate the further development of human being, create a strong path for evolution development and improving the quality of our lives. However sometimes the usage of scientific knowledge might not have the same positive intentions in terms of technologies and research appliance which sometimes lead to a propaganda usage, with the help of which governments may influence a lot on people, society and help the governments either commercial units to obtain strategically important positions within the political or economical arena. Moreover within current globalization tendencies and conditions, a lot of scientists are changing their scientific activity into the research one, not being motivated by curiosity as scientists do, but dependent salary work. The innovation products and services that are developed within such activity are not bringing any scientific significance and do not have any independence within its conduction which means that both the process and the results belong to the production function and dependent on someone's interests or motives.

Generally there are several constant features of science, which ensure the sciences' self-efficiency and independency in terms of knowledge acquiring. Mainly science is multilayered and has a basis in live experience, however the phenomena around us exists no matter whether they are already an object of science.

Science has obligatory empirical basis, which means always obtaining new, moving into new potentials, systematizing the results of different scientific methods approaches like perception, analyzing, describing, testing and others. Science always builds theories which create the realistic models of the world and build the paradigms of its deep explanation. Within that science develops different contexts of the further analysis, reasoning and explanations. In these terms there is also a risk of the potential challenges arising that are connected with human-nature relationship consequences, the extent to which technologies are implemented and finding the optimal point until they are bringing only improvements and not harming the world or society.

The advantage of the scientific process also lies in terms of it being innovative and always inventive, bringing new knowledge and cognition to the world understanding and through the technology development the transforming and improving the social wellbeing and even the conditions of the world around. Therefore, science acquires the creativity, innovative thinking, risk taking, independence, even voluntarist overconfidence to bring the high level knowledge to the world and for the sake of its wellbeing.

Acknowledgment

This scientific article was produced at the Fil. Dr. Jan-U. Sandal Institute, Finstadjordet, Norway under the supervision of Prof. Fil. Dr. Jan-Urban Sandal, Executive Director and Owner at the Fil. Dr. Jan-U. Sandal Institute (Excellence in Science and Education). The paper was produced with the support of Summit Fund (ES-01-A- Scientific Entrepreneur Grant) awarded by Fil. Dr. Jan-U. Sandal Institute.

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Anotacija

KAS YRA MOKSLAS?

Šis straipsnis yra gilių tyrimų, susijusių su mokslo esme, pagrindinėmis jo savybėmis, priemonėmis ir metodais, naudojamais geresniam ir kokybiškesniam tyrimui, rezultatas. Daugiausia dėmesio skiriama šiuolaikinio mokslo tendencijoms, jo pagrindiniams elementams ir specifikai, kurie leidžia giliai tyrinėti sparčiai besivystančio pasaulio reiškinius. Taip pat analizuojami skirtingų mokslinių metodų terminai, jų naudojimas ir taikymas.

Straipsnyje dėmesys skiriamas pagrindinėms mokslo savybėms, tokioms kaip nepriklausomybė ir savarankiškumas. Tyrimas parodė, kad, jei tik mokslas atlieka bet kokią priklausomą tyrimą, jo negalima laikyti grynu žinių įgijimo procesu, kadangi papildomi veiksniai daro įtaką tyrimų vykdymo procesui. Straipsnyje apžvelgti priklausomų mokslinių tyrimų vykdymo veiksniai, vyriausybės ir komercinių vienetų vaidmuo mokslo procese, skirtumai tarp propagandos, nepriklausomo mokslo ir žodžio laisvės. Ekonominiai ar politiniai interesai daro įtaką tyrimų rezultatams ir paprastai supainioja šiuolaikinio mokslo supratimą.

Antroje ir trečioje straipsnio dalyse analizuojamos šiuolaikinės mokslo procesų tendencijos, taip pat pateikiama apžvalga, kaip mokslas daro įtaką ir keičia visuomenės naudojamas technologijas ir to pasėkoje mokslo procesas transformuojasi į technologijų diegimo ir įgyvendinimo procesą, pabrėžiant faktą, kad mokslas yra galinga ir universali priemonė būsimai visuomenės raidai ir pasauliui, kalbant apie pasaulinę perspektyvą.

Galiausiai mokslo svarba analizuojama atsižvelgiant į tai, kad būtina kurti technologinius sprendimus, galinčius išspręsti aktualias visuomenės problemas, su kuriomis pasaulis susiduria globalizacijos sąlygomis. Straipsnyje pabrėžiama mokslo proceso tęstinumo svarba, nes jo metu ilgą laiką kaupiama ir pildoma žinių bazė, gerinamas tolesnis pažinimo procesas ir, kaip paaiškėjo atlikus tyrimą, tinkamas technologijų taikymas ir įgyvendinimas gali tapti galingu visuomenės ir pasaulio gerinimo įrankiu.

Esminiai žodžiai: mokslas, mokslinis metodas, šiuolaikinis mokslas, moksliniai tyrimai, nepriklausomas mokslas, propaganda.

**AUKŠTŲJŲ MOKYKLŲ VAIDMUO VISUOMENĖJE:
IŠŠŪKIAI, TENDENCIJOS IR PERSPEKTYVOS**

Mokslo darbai

Nr. 1 (7)

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Academic papers

Nr. 1 (7)



2018

Editor – in – chief Kankevičienė Lina

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