



THE DEVELOPMENT OF SCIENCE AND TECHNOLOGY AND ITS IMPACT ON HUMAN MORAL LIFE

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Abstract

The development of science and technology is progressing in accordance with the demands of the times. Technological users if not wise will damage the life of human life itself. The use of technology that is not balanced with qualified Human Resources will cause problems. The purpose of writing in this paper is to describe the impact of the development of science and technology on human moral life. Descriptive method with library research used in writing this paper. The results of the analysis of the development of science and technology to human moral life, namely (1) the field of information and communication, the development of science and technology allows people more quickly get the information accurately and latest in this hemisphere through the internet, However, the use of the internet abused by opening porn sites; (2) the field of education, the development of the use of media technologies such as LCD which facilitate the process of teaching and learning, the proliferation of mass media, both print and electronic as well as online adds a source of knowledge for students. However, non-educating soap opera shows in electronic media can damage students' morale; (3) the economic field, the growth of the economy with emerging industrial products that produce labor-power; (4) social and cultural fields, technological advancements allow the entry of foreign cultures that can add to the nuances of local culture and mutual cooperation to improve the cultural and social relations between countries. The negative impact of technological advancement on the rise of juvenile delinquency such as brawl, scratching in public places to crime because of culture gotong-royong and help-help, and manners as the nation's cultural products increasingly thinning among teenagers.

Keywords: science and technology, morals

1. Introduction

In everyday life man is inseparable from science and technology. What is used and utilized by humans is the result of the development of science that gave birth to technology. The rapid development of the world of science and technology has brought tremendous benefits to the progress of human civilization. So the purpose of science and technology is to solve practical problems as well as to overcome all the difficulties that humans may encounter.

As a result of human activity, science examines things, both the human self itself and the reality outside of itself. Meanwhile, technology is a practical application of such science. Science and technology need each other, without science there will be no new

application (application) for technology and without technology nobody will enjoy the discovery of science. Science and technology are closely related and much needed in human life. Without science will not be born technology, without science technology is difficult to develop. With technology also can give birth to new science.

The development of science and technology is progressing in accordance with the demands of the times. The development of science and technology is participating in the changing times. Such rapid advancement of science and technology can penetrate space and time. The world seemed to shrink as a result of this technological advancement. Technology makes the world seem unlimited and timeless. The rapid development of the world of science and technology has brought tremendous benefits to the progress of human



civilization. The various means of modern industry, communications, and transportation, for example, have proven to be highly beneficial for the development of human life. The development of science and technology is so advanced today to form a modern world civilization called the era of globalization. The symptoms of modernization, globalization, scientism, is an example of the influence of science and technology on the development of human culture.

Globalization directly or indirectly affects moral development and cultural change in a society. This happens because of technological advances that result in the world's connectedness. The outside world information is easily accessible with technology.

Technological advances are something that humans cannot avoid in this life. Technological advances will go according to the progress of science. Every innovation is created to provide positive benefits for human life, provide many conveniences, as well as new ways of doing human activities. Especially in the field of community technology has enjoyed many benefits brought by the innovations that have been generated in the last decade.

However, although initially created to produce positive benefits, on the other hand also allows to be used for the negative and can also endanger human life itself. Technological users if not wise will damage the life of human life itself. In this case, the development of science and technology can damage the human moral life itself. The use of technology that is not balanced with qualified Human Resources will cause problems.

Science and Technology

Suriasumantri (2007: 19) reveals that science is a knowledge we wrestle since we were able to think in school until we climbed the steps of the building in the College. Science is the knowledge of natural phenomena obtained through a process called the scientific method, while technology is the knowledge and skill

which is the application of science in everyday human life.

Furthermore, humans construct such knowledge into a structured form consisting of concepts, principles, propositions, and theories relating to certain natural structures, which in the next stage are called science (Djamaris, 2013: 102 -103).

Meanwhile, Alisyahbana (1980: 1) states that technology is a way of doing things to meet human needs with the help of tools and reason so as to extend, strengthen, or make more potent limbs, senses, and the human brain.

In general technology can be interpreted as a process that increases the added value of products used and produced to facilitate and improve the performance of the structure or system where the process and the product was developed and used.

Technology is closely related to science and engineering. Thus the technology contains two dimensions, namely science and engineering are interconnected with each other. Science refers to our understanding of the real world around us, which is about the basic features of the dimensions of space, matter and energy in their interaction with each other.

Science is a fundamental problem-solving tool of every civilization. Without science a civilization can not maintain its political and social structures or meet the basic needs of its people and culture. As an external manifestation of epistemology, science forms the physical, intellectual and cultural environment and promotes the mode of economic production chosen by a civilization, so it can be said that science is a means which will ultimately produce a civilization.

Development of Science and Technology

Humans with the ability to survive facing a variety of environmental changes create tools called technology. In order to meet their needs, human beings cooperate with others. Therefore, both technology and social relations are the result of human creations called culture. Both technological, social, and cultural evolutions occur along with the



development of human evolution (Bronowski, 1973).

Socrates in Aceng, (2011) states that the most valuable knowledge is knowledge of self-knowledge. Therefore, "Know thyself". Human search of natural phenomena including the behavior of sentient beings in the attention of a researcher and scientists from the classical era until now, there is a mystery in every creature be it plants, animals, animals, humans and how they survive, run life, man finds and forms his civilization or civilization and almaiah changes that shape human life style.

Alisyahbana (1980) argues that technology has been known to man since millions of years ago because of the urge to live a more comfortable, prosperous and prosperous life. So, since the beginning of civilization there has actually been technology, although the term "technology" has not been used.

The rapid development of the world of science and technology has brought tremendous benefits to the progress of human civilization. The types of work that previously required considerable physical capability, now relatively can be replaced by automatic machine tools. The robotic work system has transformed the power of human muscle with amazing magnification and acceleration. Moreover, with the discovery of new formulations of various computer capacities, as if already able to shift the position of human brain capabilities in various fields of science and human activity.

Science and technology developed with a noble purpose, namely to improve the welfare of human life. Not a single joint of human life is spared from the touch of science and technology. The development of science and technology is able to help human beings in beraktivitas in life. Especially with regard to industrial activities and telecommunications. Science and technology has also facilitated the spread of various information. Information is a very important thing for humans. Without human information will be completely behind. Moreover, when various print and electronic media developed rapidly. Humans do not have to wait long to send or receive news the development of information technology is

forcing people to be able and always get a variety of information.

Moral

According to the Great Dictionary of Indonesian Language, moral means the doctrine of good bad that is generally accepted by the morality and character, the mental condition that enables a person to remain passionate, courageous, disciplined, etc. While in the Encyclopedia of Education, morals mean a term to define the limits of qualities, features, intentions, considerations, or worthy deeds can be expressed as good / bad, right / wrong.

According to the origin of the word "moral" from the Latin word *mores*, then translated into "the rule of decency". In everyday language, what is meant by morality is not a scratch, but a clue to the life of manners and not obscenity. Thus, morals are the rules of decency, which include all the norms of behavior, good behavior. The word *susila* comes from Sanskrit, *su* means "better", please mean "basics", principles or rules of life. So *susila* means better living rules.

Moral is a knowledge that concerns civilized man's character. Moral also means good teaching and bad deeds and behavior (morals). According to Lustyantje (2016: 28) moral is a value that is used as a reference to regulate the behavior and human actions in life in society. Moral in general refers more to the notion of doctrine of good deeds, attitudes, manners and so forth (Basid and Barokatul Fitria, 2017: 100).

2. Method

This research is a qualitative research that is library research which uses books and other literature as the main object. The type of research used is qualitative, ie research that produces information in the form of records and descriptive data

3. Discussion

In this modern civilization, the development of science and technology



can not be denied again that humans desperately need it and very helpful in human life. That is, the development of science and technology bring a positive impact for the progress of the times. However, behind all that of course the development of science and technology can also bring a negative impact if humans are not wise to take advantage of the progress and sophistication of these technologies.

Here can be presented some analysis of the development of science and technology to human moral life.

In the field of information and communication, the development of science and technology makes it easier for humans to obtain accurate and latest information in this hemisphere through the internet. We can communicate with friends, as well as families who are very far only by mobile phone. We can access news, events information quickly with online media. The use of telecommunications can be misused by tapping telephone by unscrupulous persons who have the interest of leaking state secrets. The use of the internet is abused by opening porn sites, for example by children, teenagers, even board members who are meeting has ever done it. This incident can damage the moral of the nation's children who should the internet to ease in the learning process. Also a distinguished member of the council should have discussed the matter of the nation's interests, even committing a disgraceful act which gives an incorrect example.

In the field of education, the growing use of technology media such as LCD that facilitate the process of teaching and learning, mushrooming of mass media, both print and electronic as well as online adds a source of knowledge for students. With advances in technology, especially informatics technology, learning systems do not have to go through face-to-face. The learning process does not have to bring students together with teachers, but can also use email, computer, blogger, web, or others. However, the misuse of knowledge can damage the morals committed by irresponsible people by assembling bombs

for the benefit of terrorism. Another example of hackers breaking through the computer network system of a state institution for the benefit of spying and enriching themselves. Event impressions in electronic media such as television can damage the morale of students. For example, non-educational soap opera shows by displaying luxurious life and dressing that are not suitable for students. Students become dependent with the spectacle of the soap opera. In fact, it should read and learn a lot.

In the field of economy, the growth of the economy with the emergence of industrial products that produce labor-power. Thereby reducing the unemployment rate. The impact on life makes people behave consumptive that everything must exist and make the individual individual and less thankful for what has been given by the Giver. For example, parents from the upper middle class to buy a smartphone and even gadgets to his sons and daughters. Children will be engrossed in their world. The impact of their moral decline due to lack of socializing with the environment, making them less concerned with each other.

In the social and cultural field, technological advancements allow the entry of foreign cultures that can add to the nuances of local culture and mutual cooperation to improve the cultural and social relations between countries. The negative impact of technological advancement is increasing the juvenile delinquency such as brawl, scratching in public place to crime because culture gotong-royong and help-helping, and the manners as the nation's cultural product is increasingly thinning among teenagers.

4. Conclusion

The era of globalization as a result of technological developments has had an impact on almost all aspects of community life. The change of society due to the development of the technology has a great impact on the development of information and communication, education, economy, social and culture.



The advancement of science and technology on civilization and human welfare is very helpful. The development of technology is very necessary. Every innovation is created to provide positive benefits for human life, provide many conveniences, as well as new ways of doing human activities. Especially in the field of community technology has enjoyed many benefits brought by the innovations that have been produced. Among other things, with the development of advances in the field of internet network has made it easier for us to access information quickly and very light cost. Advancements in the field of communication have also made international trade easier and faster, as well as facilitating the interaction of fellow human beings.

However, science and technology can also bring misfortune and misery to humans. These impacts include the use of communication networks that can be misused by certain parties for a particular purpose. Then, the widespread use of the Internet in digging information and certain sites, such as cases of the spread of pornography is increasingly widespread, many television shows featuring impressions that do not educate that can damage the morale of the next generation of the nation.

To overcome the negative impacts arising from the progress of science and technology is expected the active role of the family, especially the parents in educating and assisting their children in the use of technology. Then, parents should set an example to their children through

religious knowledge and moral good. Truly good religion and morals are the main foundation in the face of the development of science and technology.

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