

The Development of the Human Mindset Towards the Advancement of Science, Technology And Science

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Abstract

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This article explains how the development of mindset in humans can have an impact on the progress of science and technology. This article's research is to provide an understanding of what factors influence the development of mindset in humans to what impact on the progress of science and technology. This type of research is a literature review that comes from various kinds of literature that have a relationship with the development of mindset on the development and progress of science and technology.

Keywords: Mindset, Innovation, Sains, IPTEK

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INTRODUCTION

The development of science and technology has been one of the main drivers of the transformation of education and human civilization throughout the history of the world. From the invention and utilization of the wheel to the industrial revolution that took the world by storm. All of these innovations have certainly brought significant progress to how humans understand and interact with the world. These advancements certainly do not only occur in the realm of technology, but have begun to spread and affect the way of thinking or mindset of humans.

Mindset is a human mental framework or what is commonly called a pattern of thought and determines the way a person perceives and responds to everything around him. In the context of the development of science and technology, human mindset in general has an important role in determining the extent to which innovation can occur, be developed, and then utilized for the good of other humans. This change has gradually occurred from the traditional mindset to a mindset that is starting to be adaptive to the development of science and technology, which is still a challenge for many people to build a process of social and cultural transformation at this time.

The approach that must be taken to the development of science and technology is certainly not always the same and certainly varies in various parts of the world. There are so many factors that cause this to happen. Cultural, educational, economic, and social factors often contribute to this.

RESEARCH METHOD

In facing the challenges of the modern era, developing a mindset of advancement in science, technology and science is very important. the first method we used was a survey. We create a question that will be answered by the learners. The learners included university students as well as students. Learners gave opinions that education can influence the view of science and technology. A learner if in class learning lacks understanding learners will learn for themselves through technology. This technology is very helpful in the process of developing students' knowledge. However, students must be wise in using a technology so that humans do not lose their way of working or their mindset in technology.

Technology improves the quality of human life where if humans read novels, applications make money. Technology can also be used for human daily life. If you work to calculate a store expense using a calculator. In addition, technology can help humans to sell a product around the world so that the product is not only in the surrounding environment but widely. Technology also affects human science by providing news so that humans are more critical in overcoming problems. This technological development is very much related to science and science.

This science affects the human mindset so that humans want to try something new. Science also states new data that can produce technology. The development of the human mindset in science is influenced by curiosity, science and the times. Along with the times, science will develop so that the critical and analytical human mindset will produce new knowledge. However, it should also be noted that along with science technology will not be inferior in its development.

The literacy method used in this research aims to understand the human mindset that develops along with advances in science, technology and science. Therefore, this research collects and analyzes various sources, namely E-Books and journals. The data collection process was carried out by conducting in-depth searches on academic platforms such as Google Scholar and Google books, as well as by browsing references from recent studies. The collected data was then categorized based on themes, such as the influence of technology on society and changing attitudes towards education and science. Qualitative analysis was conducted to identify emerging patterns, as well as the social and cultural contexts that influence mindset development. Combining the results of the analysis, this research is expected to provide a comprehensive insight into the relationship between scientific and technological advances and the development of human mindset, as well as offer recommendations to raise awareness of the importance of science in modern life.

RESULTS AND DISCUSSION

When it comes to mindset, many people tend to think of it as an attitude, a way to succeed, or a mindset. However, almost all of these understandings are actually incorrect. So, what exactly is a mindset? Based on the definition from the Encarta Electronic Dictionary, mindset consists of two words, namely "mind" and "set". "Mind" refers to the source of thought and memory, which is the center of consciousness that generates thoughts, feelings, ideas, perceptions, and conveys knowledge and memory. Meanwhile, "set" means to focus on improving one's ability in an activity. Combined, mindset means beliefs that influence one's attitude, or a set of beliefs and ways of thinking that influence one's behavior, outlook, attitude, and future. From this explanation, it can be concluded that mindset is actually a belief or way of thinking that affects a person's behavior, which will ultimately determine the future or fate of that person.

There are several definitions of mindset according to experts. Etymologically, the word mindset consists of two parts, namely "mind" which means the mind or center of consciousness that generates ideas and stores memory, and "set" which means the ability to do something. According to Mulyadi (2007), mindset is a person's mental perspective that can affect the way the person deals with a phenomenon. According to Dr. Ibrahim Elfiky in Satria (2015), mindset is a collection of thoughts that appear in various contexts, which are reinforced with beliefs and can influence a person in making decisions regarding the direction of his life.

Based on some of the above definitions, it can be concluded that a mindset is a set of beliefs or perspectives that influence a person in taking action and behaving towards certain things. Mindset consists of three main elements: paradigm, core beliefs, and core values. Paradigms refer to the way a person views things. Fundamental beliefs are the beliefs that a person has towards something. Core values include attitudes, traits, and character traits that an individual values, which then guide his or her actions based on those values.

A person's actions are strongly influenced by the way he views things. In addition, a person acts based on what he believes to be true. The values upheld by individuals become guidelines in making decisions on actions to be taken. Taken together, paradigms, basic beliefs and basic values form a mental map that guides a person's actions. We believe that we see the world as it is. However, in reality, we see the world through our views and mindset. Paradigms, core beliefs and core values serve as the lens through which we view the world. Often, a person is less effective in an environment because he or she is using the wrong map-a map that does not accurately reflect the state of the environment he or she is facing.

Edgar H. Schein developed a framework that describes the structure of organizational culture. Figure 3.1 shows the building blocks of organizational culture built on Schein's model. According to this framework, organizational culture consists of three levels. The first level is the paradigm, which reflects the way the organization views things. The second level includes the basic beliefs and core values that, together with the paradigm, form the mindset of the organization. This mindset is an element that is not directly visible, but exists in the minds of organizational members. It is this mindset that influences the behavior of organizational members in carrying out business activities on behalf of the

organization. In an organization, individuals operate through a system, so their behavior is governed by the management system. The behavior that appears in running the organization's business is part of the organizational culture that is visible to the outside and can be observed. This behavior can be explained through the paradigms, basic beliefs, and core values that exist in the minds of organizational members.

The development of technology today has progressed very rapidly. In this digital era, almost every aspect of human life is changing, and many people are starting to adopt a new lifestyle that relies heavily on the use of electronic devices. Technology is now not only a tool to increase efficiency, but also serves as the main means to fulfill various human needs, whether in work, communication, or entertainment. In Indonesia, technological advancements are increasingly being felt, with people increasingly utilizing various products and technological innovations that continue to grow. Technology such as laptops, cellphones, and other electronic devices have now become an integral part of everyday life.

However, in the midst of this rapid technological development, millennials often experience disorientation or confusion in determining the direction of their lives. Many of them are caught up in the flow of the times, making the world and technological advancements the main goal in their lives. This condition causes a shift in character and mindset, where they focus more on material and technological developments rather than deeper values in life. This rapidly evolving human mindset certainly has a huge impact on their attitude and behavior. Therefore, it is important to realize that everything related to the human person should be treated seriously, not something that can be taken lightly, because its impact will greatly affect the way they interact with the world around them and shape their character.

Technology as an additional tool indicates that technology has become an integral part of our identity and daily lives. By recognizing this, individuals can be more open to innovation and adapt to change more easily. The change in mindset also emphasizes the importance of creativity and innovation in dealing with technological developments. One should see technological advancements as opportunities to explore new ideas, create creative solutions, and make a positive impact on society. By honing their creative attitude, they can become agents of change in shaping the future of technology.

In addition, mindset transformation involves developing strong adaptability. Individuals need to develop skills that enable them to switch from one technology to another quickly and effectively. This includes the ability to learn independently, think critically, and cooperate with others to solve complex problems.

In the context of education, changing mindsets require innovative and inclusive learning methods. Education should provide opportunities for individuals to develop the technical and non-technical skills necessary for success in a changing world. This includes encouragement for cross-field collaboration, project-based learning, and integration of technology in the educational process. Overall, mindset transformation in the face of technological developments in the field of technology is key to managing change well. With a deep understanding, acceptance, emphasis on creativity and innovation, and the development of

adaptation skills, one can become a future leader who is able to make a positive impact and help create a better future for society and the world of technology.

The development of artificial intelligence (AI) has become one of the most important trends in today's tech world. Along with these advancements, it is important for individuals and society to change their mindset. In this context, we will discuss why the adoption of the right mindset is crucial in dealing with the changes brought about by AI. An AI-driven world requires new skills as well as the ability to adapt quickly to technological advancements. Having a proactive learning mindset and the ability to adapt to change is key to success in the AI era. This means being ready to keep learning, exploring new opportunities, and investing in relevant skills development.

Skills such as programming, data analysis and artificial intelligence are becoming increasingly important in the AI-driven world of work. With a mindset that is open to new learning, individuals can develop these skills, open up more job opportunities, and increase competitiveness in an increasingly competitive job market. Changing mindsets also involves rethinking the role of humans in an increasingly connected and automated society. As technology begins to take over routine tasks, humans can focus more on the more valuable aspects of life, such as creativity, empathy and innovation. A progressive mindset encourages us to see AI as a tool that can improve our quality of life and give us more time to pursue personal goals and make positive contributions to society.

In this context, it is also important to consider the social impact of AI advancements. A progressive mindset requires ethical considerations in the development and application of AI technologies. Changing the mindset means recognizing the collective responsibility to ensure that artificial intelligence is used for the common good and does not create inequality or harm certain groups in society.

A change in mindset also includes efforts to expand access to opportunities arising from AI developments. Given the rapid pace of technological change, it is critical to ensure that all segments of society have access to AI-related training, education, and employment opportunities. An inclusive mindset views technology as a tool to improve social and economic inclusion, rather than a dividing factor. Overall, a change in mindset is crucial in addressing AI advancements. By viewing AI as an opportunity rather than a threat, we can create a better future and play a role in defining humanity's place in this technological era. Through mindset change, we can lead the way in the face of change and open up new possibilities that were previously unthinkable.

Growth mindset owners are very open to criticism from others. They will take the criticism as a means for reflection and learning that can help them achieve success and a better life. So, why is a growth mindset important for the progress of Indonesia? Adopting a growth mindset, we tend to think positively and keep trying to improve ourselves. Having a growth mindset makes us more prepared to face life's challenges, without focusing too much on the negative impacts that may arise. In addition, we will appreciate every process we go through. With this mindset, we continue to strive to develop new skills and abilities to achieve our goals.

Growth mindset is also critical to the progress of the nation, as it encourages innovation, continuous learning, and resilience in the face of challenges. It helps individuals and communities not to fear failure and to see mistakes as opportunities for growth. In the context of a nation, this mindset can accelerate progress in economic, social and cultural fields.

CONCLUSION

In facing the challenges of the modern era, developing a mindset of advances in science, technology and science is essential. One of the effective methods is project-based learning, practical experiments provide opportunities to test theories directly, strengthen understanding through experience, group discussions, and the use of digital technology. Discussion

In this modern era, the development of mindset and the advancement of science and technology are very important. Effective learning methods in the current era such as project-based learning, experiments or research, group discussions can make students understand and technology better. From the use of digital technology students can access important information more widely and can improve their learning and knowledge.

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