



ICT Education for Children

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The advancement of technology cannot be separated from daily life. Various information that occurs in various parts of the world can now be directly known to us because of technological advances (globalization). Currently, the world has become increasingly narrow because of the rapid access to information in various parts of the world. Today, we can know the situation in America even though we are in Indonesia.

Obviously, these technological advances have caused such great changes in human life in all its civilizations and cultures. This change also has a huge impact on the transformation of existing values in society, especially among people with eastern culture and customs like Indonesia. Currently, in Indonesia, we can see the great influence of technological progress on the cultural values adopted by the community, both urban and rural communities (modernization). Technological advances such as television, telephones and smartphone, and even the internet have not only hit urban communities but have also been utilized by people in remote villages. As a result, all information, both positive and negative, can be easily accessed by the public and slowly start to change the lifestyle and mindset of the community, especially rural communities with all the images that characterize them.

Currently, millions of children and adolescents have entered the digital era through the virtual world of life on the Internet. The community-entertainment web industry is growing at such a fast pace. Club Penguin, Webkinz, Starfall, and Facebook are probably just a few of the millions of 'kid-friendly sites' that are currently being loved by children. Most fans of this website are school-age children to college students. These sites are enjoying the benefits of the phenomenon. For example, Webkinz, a maker of children's toys that take characters from virtual worlds, experienced growth in visitors of up to 6 million children this year, 300% higher than last year's visitor numbers. This indicates that children are an easy target for advertisers.

Besides being the target of advertisements, children are also very much involved in the growth of multimedia technology, especially in education and entertainment. In the world of education, it has been found that educational sites and software are used as a means of educating children. Even for 5-year-olds, educational software and games are now available with music to help them develop their abilities and intelligence.

The development of games, especially online ones, is also very influential and currently favoured by children. There are children who like violent games. We need to pay attention to this because this will have a destructive impact on children and is very dangerous. However, in the midst of the development of games that create virtual worlds for children, it turns out that there is still little concern shown by several game vendors with the existence of virtual world education. Furthermore, this type of virtual world is intended for educational purposes where Modern Prometheus teaches children to learn ethics and make decisions. In this game, children are involved in a scenario where they have to make strategic decisions concerning ethical issues from different perspectives.

Then the internet is also one of the things that can affect children. Children can easily find out about everything they want to know with the internet. However, the thing to note here is that the easier and more familiar children are with the Internet and finding various kinds of information on the Internet, it should not reduce children's verbal and social growth in the real world. This is based on the fact that the results of research on children in America, which turned out to be very quickly able to pinpoint the location of Iraq with the Internet but became confused when looking for its location on a physical globe. Obviously, facts like this are something that must be considered in the development of future educational technology.

THE IMPACTS OF ICT FOR CHILDREN

Information and Communication Technology have several impacts on children. From this, we can classify them into 2 groups, which are positive and negative effects.

a. Positive Impact

- Children can use educational software such as basic knowledge programs for reading, arithmetic, history, geography, and so on. Moreover, this educational device is currently also combined with entertainment elements that are in accordance with the material, so that children can enjoy it even more.
- Making children more interested in learning.
- Be a solution for children to not easily be bored while learning.
- Increasing the insight of children and providing them various additional knowledge through the Internet.

b. Negative Impact

- Children can be dependent on Information and Communication Technology.
- Children will tend to do their own assignments with the help of the internet rather than study in groups where there are a lot of lessons contained in the value of togetherness.
- Being affected in the bad community without proper control from parents
- Children may accidentally access pornographic sites.
- Reducing the social nature of humans because they tend to prefer to connect via the internet rather than meet in person (face to face).
- Most likely, without the knowledge of the parents, the child 'consumes' games that feature elements such as violence and aggressiveness. Many education experts have indicated that these violent and aggressive games are the trigger for the emergence of aggressive and sadistic behaviours in children.

THE CRUCIAL ROLE OF PARENTS

Considering the pros and cons of introducing computers to children, in the end, it really depends on the readiness of parents to introduce and supervise children when playing with computers. Therefore, to all parents, I again remind them of their important role in the use of computers for children.

1. Providing opportunities for children to learn and interact with computers

at an early stage especially considering the use of computers is something that cannot be avoided at this time and in the future.

2. Note that computers also have certain effects, including physical ones. Pay attention to space and lighting settings. The bright lighting and the close distance of the computers can interfere with the vision of children.

3. Choose certain software that is intended for children. Even if the chosen program is an edutainment program or game, always adjust it to the child's age and ability.

4. Paying attention to the safety of children when playing with computers from electrical hazards. Avoid a short circuit occurring or the possibility of electrocution being exposed to certain parts of the computer's Central Processing Unit (CPU).

5. Find an ergonomic table or chair (according to the shape and size child's body), which is comfortable for the child so that the child can wear it easily. Do not let the mouse be too high, or the head must be tilted which can cause fatigue. Work tools that are not ergonomic are also not good for children's anatomy in the long term.

6. Playing on the computer is not the only activity for children. Do not let the child lose social activities with friends because they are too busy playing on the computer.

Solution

The right solution to deal with the problems described in this problem is the role of parents. The role of parents is very essential. Both parents are expected to be able to guide and supervise their children in using Information and Communication Technology. Therefore, children can understand what things are positive and negative.



It is parents who should introduce the internet to their children, not other people. Introducing the internet also means introducing the benefits and purposes of using the internet. Therefore, parents must first be 'literate' in media and be familiar with it. It is better to use software specifically designed to protect the 'health' of children. For example, the nany chip or parent lock program can protect children by locking all access to sex and violence.

Placing the computer in a public room at home, such as the library, or family room, and not in the child's room can be such prevention and control. Putting the computer in the child's room will make it difficult for parents to supervise them. Children can freely access pornographic sites or use games that are related to violence and sadistic in locked rooms. If the computer is in the family room, the freedom to break the rules will be limited because there are family members passing by. Embrace the value of togetherness with others, because togetherness will create very close relationships and emotions.