Critical Awareness as an Antecedent in Strengthening the Side of Humanity in Education in the Disruptive Era

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Abstract

Disruptive era marked by change driven by innovation in science and technology also penetrated the world of education. Teaching innovation in the form of online) is an option because it is considered effective, has a broad reach, crosses the physical boundaries of the school / campus and the state, and time. Demoralization of education is also a part of the process in the disruptive era. Education that is important in shaping nobility becomes a loss of spirit, because unwholesome learning behavior also occurs in facilitating technological progress. Without nobility, even negative characters can thrive in education. The quality of education can not only be measured pragmatically from the achievement of the minimum criteria set. Education should not produce intelligent robots, but education should empower individuals, so that they have subjective competencies that make them aware of themselves and their environment. Here is the important position of the need for education to develop critical awareness of a human person. So that in the advancement of technology, he still realized that he was a human who still had to be human and not be anti-social, and lived apart from his social space. This is the other side of education in a disruptive era that is not sufficiently reached only with the advancement of science and technology.

Keywords: disruptive, education, critical awareness, demoralization, humanity.

Introduction

The current technological era has a lot of impact on human life and development. Technological advances have caused fundamental changes in various fields of life, including the world of education. Technology innovation has driven various changes, not only in technology itself but also in human life, the way humans relate, and the way we organize (Gardiner, 2017:115). Today there are almost no humans who are not under the influence of technological modernity. The way humans live is colored and facilitated by technological advancements.

Humans cannot avoid the strong influence; it is even possible for humans to become so dependent on and controlled by technology that it never seems to stop developing and changing. Sustainable Innovation in this digital era promises a lot of convenience to humans and brings people to other life settings that are different from the previous order. The relationship between humans runs so easily, because distance and time are no longer a significant obstacle. Learning also becomes practical because it can be done anywhere in technology facilities. In this atmosphere of life, the strength of intervention in humans is getting stronger. Intervention of communication technology causes humans no longer have to meet face to face when they want to greet each other. The advancement in technology has brought the distance closer, even though the technology has also made individual human beings that are really close each other have their own digital world. Digital communication may also ask people to present their own self untruly. They easily lie due to their self-imaging.

Human character also becomes more easily changed and shaped by the strength of that technology. In the dynamic characteristics possessed by humans, in every human desire to seek convenience, and achieve comfort or a better life, everyone needs to realize that the presence of technology must not exclude humans. Technology should not marginalize and control humans.

Education in Disruption Era

Innovation of technology has changed all old systems to the new ones. The old technology characterized with physics has been changing to digital technology that is real new, more efficient, and more useful (Kasali, 2017, 34). Without strategic adaptation and respond, all old subjects will be marginalized and replaced by new subjects who were born by innovation and creative technology. Internet as technology production has been changed all the ways of humans' life. Innovation has moved, colored humans live, and chosen social order, built disrupted society, and pushes every people to think fast with disruptive mindset (easily adaptive response mindset), not steady mindset. Disruptive mindset likes to get new ways, critics on new information, digitally work, and always connected with virtual world (Sumardianta and Kris, 2018:9). Blindly using technology is likely to be ineffective (Dierdorff and Holtom, 2013:365). Disruption can't be avoided todays, included in education.

Technology has facilitated anyone who wants to learn. Internet of Things (IOT) Era creates possibility to develop all both positive and negative activities. Because of the innovation technology; the new platform like MOOCs (Massive Open Online Course) was born. MOOCs allow a person to learn on their own because they are able to find information on their own, determine what they will learn on their own, according to their own schedule (Leksono, 2017). Learning is no longer limited by real space and time. Every time learning opportunities can be achieved, because virtual schools are never closed. Video learning is designed to be internet media and learning sources in education. The right to learn is easier to fulfill, but at the same time, the negative influence may easier to influence. As a creature that is very intelligent and acts very flexibly in such conditions, humans will change more easily.

In the frame of character building, educational institutions are not a single variable to build human character. Human character is influenced by the attraction of various factors caused by various systems operating simultaneously (Priyatma, 2017:21). The power of technology has brought fundamental changes in human life. In the definition of a new life, the culture of society cannot avoid the influencing power of technology innovation. Technology advances promise so much convenience for humans. Many things can be done faster. For getting information, it is easy to download from internet. Because of that, the hard struggle to complete an activity has become so helped by technology. Plagiary is easily done. Practical and instant is the discourse of knowledge and truth ideologies in this era. The culture of pragmatism which is increasingly internalized in the social body increasingly results in people not learning, not reading, not critical, and narrow knowledge (Kusumadewi, 2017:24). People need to understand the true reason of using internet in learning. The neglecting of these learning habits will cause the stronger (negative) character.

Therefore, appropriately addressing all technological advances is an important issue that must be realized with wisdom. Education not only emphasizes the acquisition of aspects of knowledge, but education is also emphasized in a humanistic orientation, which helps students to develop their ability to reason, account for their statements, beliefs, and actions (Haryatmoko, 2002:41). In order for achieving the humanistic orientation, further explained that the benchmarks are (1) interest in reading and the ability to understand what is read which will appear from his ability to express ideas systematically and argumentatively. (2) The ability to apprehend other people's thoughts correctly and the ability to respond openly and critically. (3) The habit of systematically studying what is done and conducting studies as the basis for forming their own opinions. This shows that this humanistic

aspect concerns the ability of a learner to interact with and respond to other people's ideas and thoughts appropriately and build their rational-critical skills and personal ideas. The characters that develop according to this orientation are open, independent, and responsible.

Openness shows willingness to open up to differences. Don't feel right and always willing to change. Independence shows that dependence on others makes a person helpless. Relying on the ability of oneself to be able to solve problems faced is an important thing that everyone should have. In this way individuals are not positioned "colonized" by the power of others, ideologies, thoughts, including technology. Responsible illustrates that expressing the desire not to let go of the problems faced just like that, but face and resolve them with sincerity and attention in rational considerations. The swift flow of information and technological advancements that affect every aspect of human life requires humans to have the ability to think and act which always puts forward the virtues in life. This is critical thinking.

Potter (2010:6) suggests that there is future situation that needs to be faced based on critical thinking skills. *First*, there is an explosion of information. At present there is an explosion of information coming from tens of thousands of web search engines on the internet. Information from various sources may be outdated, incomplete, or not credible. In the future, Muller, to be able to use this information well, needs to evaluate the data and sources of information. The ability to evaluate and then decide to use the right information requires critical thinking skills. Therefore, critical thinking skills really need to be developed in student. *Second*, there are global challenges. Nowadays there is a serious global crisis, poverty, and hungers occur everywhere. To overcome this crisis condition, research and development of critical thinking skills is needed. Global life can not only make us have a global value orientation, but also may be able to sink our identity and society. The current value of globalization that blows us down (whatever the children) at any time will erode our identity as a nation. *Third*, there are differences in citizen knowledge. So far the majority of people under 25 have been able to online their news. Some information that is not reliable and may even be deliberately misleading is contained on the internet. In order for students not to get lost in taking so much available information, anticipation is needed. Learners need to be trained to evaluate the reliability of web resources so that they will not be victims of wrong or good information.

The presence of technology is also very possible to make the presence of individuals around them become meaningless. Technology can alienate human individuals that actually exist and are close together. The character of caring for the environment is very likely to be eroded as the impact of technological progress.

The Power of Critical Awareness

Critical thinking focuses not on what causes a belief, but on whether it is worth believing (Vaughn, 2008:4). A belief is worth believing, or accepting, if we have good reasons to accept it. The better the reasons for acceptance, the more likely the belief is to be true. According to Ruland (2003:1-3) critical thinking must always refer to and be based on a standard called universal intellectual standards. The universal intellectual standard is standardization that must be applied in thinking that is used to check the quality of thought in formulating problems, issues, or certain situations. Intellectual universal standards include: clarity, accuracy, precision, relevance, depth. Critical thinking involves inductive thinking skills such as recognizing relationships, analyzing open problems, determining causes and consequences, drawing conclusions and calculating relevant data. While deductive thinking skills involve the ability to solve spatial, logical syllogistic problems and distinguish facts and opinions. Other critical thinking skills are the ability to detect bias, evaluate, compare and contrast.

Ennis and Paul (1982) emphasize the skills and processes related to critical thinking. Furthermore, Paul distinguishes critical thinking in a critical sense in the weak sense of critical thinking in a strong

sense. Critical thinking in a weak sense implies the ability to think critically about one's position, not someone else's position. Critical thinking in a strong sense shows the ability to think critically about one's position, arguments, assumptions, and worldview. Browne and Keeley (2012:11) suggest that weak critical reasoning shows the use of critical thoughts to maintain our initial beliefs, while strong critical reasoning shows the use of critical thoughts to review all claims and beliefs, especially those we have. For Paul, critical thinking includes deep knowledge of oneself, which requires intellectual courage and humility. Strong critical thinkers are able to understand the bigger picture holistically, to see the world view in perspective, which is different not just to criticize individual steps in certain arguments. For him, dialogue with other people, who have a different worldview and cultural background, is an important feature of critical thinking. Thus we learn to see things from different perspectives to contextualize our view of the world into a bigger picture. The positive consequence of critical thinking is the growth of tolerance (Mason, 2008:3).

In addition, the important thing that someone does in critical thinking is the awareness and reasons that are believed by him in making decisions. Cotrell (2005:3) expresses reason / reasoning starting from ourselves, which includes having reasons and awareness for what we believe and carry out, and critically evaluating our beliefs and actions and can state to others about the reasons for our beliefs and actions. People who think critically have skepticism; they will not simply accept and trust a situation or thought. Skeptics do not refer to a person's inability to make decisions, but need to be raised when the evidence and reason are not enough to make a decision. This skepticism actually causes him to always want to question something, seek truth, think about it, and make decisions based on values that he believes will be able to foster virtue in life. Critical reasoning reflective thinking is deciding what to believe or do (Ennis, 1996: 170). The emphasis is on reasonableness, reflection, and process of making decisions. Of course, this skepticism is not needed when the evidence and reasons that exist are enough to be the basis for doing something. So critical thinking is a reflective thinking process that is directed at decisions about what is believed to be done. People do not believe virtual information easily.

With critical thinking skills, students always learn to gather sufficient evidence before deciding something, think rationally and not emotionally, always learn to respect others but also develop self-confidence, always develop curiosity and their alignments to a better life, not only for themselves, but also for life around it. Critical thinking is evaluative thinking and that is specifically related to the quality of thoughts or arguments put forward in order to make decisions to support a belief or action. Therefore, it is a mistake to see that critical thinking is negative, as if critical thinking is always about sharply criticizing other people's ideas; because actually critical thinking also reflects the courage to evaluate one's own ideas and/or accept other people's ideas better (DE socialization).

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Strengthening the Side of Humanity in Education

Education is a humanitarian process including forming and directing human development in the face of life and the global crisis. The position of man in facing the global crisis can take three forms (Tilaar and Paat, 2011: 4-5): (1) join in drifting together in global change so that individuals lose their individual, group, country and cultural identity. (2) Opposing all forms of change from the outside,

so that ethnocentrism and fundamentalism can emerge. (3) Seeing the flow of globalization as a form of change that cannot be avoided and needs to be addressed with full awareness (critical). As mention before, in the frame of disruption era, opposing and avoiding changing coming from the technology will take people to be marginalized and dominated by the power of disruption.

The use of technology without critical pedagogic will have an impact on the humiliation of students as whole human beings. In a critical theory and pedagogic view, humans are always placed as subjects in power, promoting humanism, and view technology as not neutral (McLaren, 1995). According to Subkhan (2011:146-149) the critical absence of pedagogics in technological progress will lead to the following conditions. (1) Educational technology is alienated and uprooted from the surrounding socio-cultural context, so that it is deemed certain to be successfully used in all socio-cultural contexts and hegemonic in nature. (2) The study and praxis of technology are very much concerned with technical matters so that they pay little attention to ethical, moral, or ideological issues. (3) Technology can obscure the nature and purpose of the expected education, because it prioritizes technology itself and not its contents. (4) Technology is considered neutral, is considered always good, and can control and resolve all aspects of life and human social problems, even as - process can get rid of and replace human position.

Anyone can put anything on the internet, so that it can be very difficult to distinguish good sources of information from poor ones to find credible, reliable, and authoritative sources of information, and to do this reasonably quickly. Therefore, it is important to think critically about found on the internet (Fisher, 2013:184). Thinking is a marker of the difference between humans and other creatures of God. Relating to that, Glaser (1941: 6) listed thinking skills which they see as basic to critical thinking abilities, those are: to recognize problems, to find workable means for meeting those problems, to gather and marshal pertinent information, to recognize unstated assumptions and values, to comprehend and use language with accuracy, clarity and discrimination, to interpret data, to appraise evidence and evaluate statements, to recognize the existence of logical relationships between propositions, to draw warranted conclusions and generalizations, to put to test the generalizations and conclusions at which one arrives, to reconstruct one's patterns of beliefs on the basis of wider experience, and to render accurate judgments about specific things and qualities in everyday life. Those are critical thinking skills.

These skills are important for every individual in this era. Education must be able to develop these skills, so that humans will still be controlling themselves and not vice versa. Different situations and different social values will not be read by technology. Technology does not have an emotional side so it will not be able to touch aspects of feeling and love in its presence. (That is why the world of education will never be able to negate the full presence of teachers, because the process of being human will actually be driven by humans). Here, skill and awareness to think critically become antecedent in the disruption era. This mindset is very important in disruptive mindset. Without these capabilities, people are easily to be disrupted by the disruption situation.

Conclusions

Technology innovation has brought a new color of life to humans. Progress and technological facilities make people easier to fulfill their life needs. This condition intervenes in life, character, human ways of thinking, and acting. The culture of society has changed because of the influence of technological advances. Humans prefer things that are pragmatic, instant, and fast. This has an impact on the ways humans learn. Humans do not like to learn, do not like to read, are not critical, and have limited knowledge. Technology becomes the rhythm of human life. Humans are positioned in the control of the technology they created.

Humans become deprived of their essence as human beings, who are unique, have different desires; have different needs in different spaces and times. The uniformity of how to see humans

occurs because technology is positioned as a human regulator. This is considered as something that is value free. Humans are uniform because of technology. Education does not merely function as a medium for transferring knowledge; education must remain a guardian of nobility. For this reason, technology must be used wisely and not be a regulator of human life. Technology must still be put in place as an instrument that facilitates human life towards a better life and still puts forward the human side. This is where the importance of critical thinking and awareness are placed as an antecedent in education in this disruption era.

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