Research on Negative Effect on E-Learning

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ABSTRACT

This paper expounds the negative effect of E-learning in respect that E-learning commits harm to learners' health, results in "lost in internet", strengthens learners' separation from real world, weakens learners' logical ability and eases face-to-face interactive relationship. It points E-learning is not the perfect solution to studying, for the hope of arousing people's focus on negative effective of E-learning so as to evade misuse in practice.

KEYWORDS

E-learning; Negative effect; Studying; learners; internet

1. INTRODUCTION

Bill Gates' dream in childhood is "there is a computer on each desk in each house". When technology of computer becomes prevalent and complicated, he designs another era "people all over the world can study best subjects, study any subject by the best teachers in their own home". Since 21st century various information technologies especially the modern information technology based on computer and network communication create new educational culture. With the advancement of world-wide educational information waves, more and more people believe E-learning will become the main ways of people's studying, which will be advanced constantly in theory and practice.

However, people have zeal for exploring how computer and network technology optimize studying, ignoring negative effect resulting in many theoretical advocations but a few successful cases. Will E-learning become the main ways of people's studying? Is it evitable or just people's wishful dream? This essay expounds some negative effect of E-learning to illuminate E-learning is not the perfect solution to studying for the hope of arousing people's emphasis on negative effect of E-learning so as to evade misuse of E-learning in practice.

2. E-LEARNING AND ITS CHARACTERS

To be simple, so-called E-learning is the on-line studying or network studying. That establishes network in the field of education. The students can be on-line by PC, which is the new studying way by network. [1] It makes full use of studying environment of newly communicative institution and profound resources provided by IT technology, such as computer network, multimedia, professional content network, information search, digital library, distanced studying, on-line class and so on to realize newly studying ways.[2]

People believe E-learning will become the main studying ways in the future accounting of following characters of E-learning:
2.1. Multi-medialization of Studying Material

Studying information covering words and images to present sound, cartoon and video and even three-dimensional scene largely enriches the expressive ways of studying material; so as to realize multi-tunnel transmission of information, improve transmissive efficiency and quality to improve effect of study.

2.2. Autonomous learning

E-learning can provide profound and diverse studying resource and be presented by hyper-text. Students have broad choice of teaching material, teachers teaching tool, consultant material and etc so as to realize free exploration of knowledge" E-learning can reverse the traditional, institutional subordination of studying subject which is controlled by study to express automation to largest extent from studying content and type, studying steps and schedule to studying time and place.

2.3. Virtualization of Study

Educational activity can separate from physical space and time limitation. Human makes use of computer and communicative technology to create virtual library, virtual class, virtual community, virtual city and even virtual country virtual objects created in virtual spaced world improve largely studying subjects’ ability of cognition, enlarge space of cognition. The restrictions in real world on human's practical activities disappear in the world of network, virtual object is not restricted to attribute, state and regulation any longer, practical activity set free from restrictions of space, climate and some other outer restrictions. Resorting to technology of virtual world, we can construct any real object even to our content and even can image fantastic object.' For example, studying medical science can repeat operation on virtual body; studying chemistry can observe molecular structure exploring into the inner of substance. [3]

2.4. Contact of space-time out limit Relationship

On the one hand the contact of E-learning eliminates the space-time barricade of people's contact to realize communication wherever and whenever without personal attendance, on the other hand, to some extent, it overcomes interpersonal barricade in real world so as to make people freely and equally communication getting away from various differences, such as social status, life style, cultural background. This kind of study can help contact more efficient, convenient, equal and broad" At present people practice about community of network study is based on this character of E-learning.

Obviously, people have confidence in applicative perspective of E-learning with strong expectation. In ED-media of World Conference of 201A, on statistic analysis of frequency of key words exacted from content and topic of 630 essays advanced by conference, we discover "conference puts focus on how to utilized technology of information communication to develop study and teach, this kind of focus is on how to develop on-line study better, instead not merely on how to utilize information technology to enlarge class in traditional face-to-face teaching."[4] In group speech of conference, many participators use the same pictures that hundreds of students is having class with a laptop on their knees to prove our class cannot proceed without technology of information. [4]
3. NEGATIVE EFFECT OF E-LEARNING

However, the essence of technology is doubled by impartment and requirement. Computer technology, especially the development of network technology exerts both great convenience to human's production, life and education and negative influence. So far, if E-learning is considered as main studying ways, it will exert following negative influence:

3.1. Harm to Learners' Health

More and more evidences prove that long-time usage of computer can do harm to people's health. It mainly includes electromagnetic radiation, harm to eyesight and damage of organs and so on.

3.1.1. Electromagnetic radiation

On operating, computer will emit electromagnetic wave, which pollutes surrounding environment harmful to health. Although people stipulate strictly the radiation of electronic products (such as 3c certification forcefully fulfilled in domestic), it is impossible to eradicate radiation in computer design. According to survey in British, radiation and magnetic field of low frequency emitted by computer will conduces to 7 to 19 kinds of diseases covering running nose, itch on eyes, pain on neck and back, temporary laptop memories, short- temper, and gloom and so on. Related convey discovered electromagnetic radiation also will conduces to cancer. The number of accumulation of electromagnetic radiation has direct ratio to product between intensity of radiation and time of radiation. If people takes long time to study in front of computer, their health will face huge threat. Especially in studying environment of centered-computer, it is difficult to keep secure distance from radiation resource, which will be hurtful to learners.

3.1.2. Harm to eyesight

E-learning is a kind of studying way based on screen, which presents series of changing and rolling up and down signals and figures will be harmful to eyes, which is vulnerable to conduces to teenagers' shortsightedness and ciliary spasm. The so-called computer vision syndrome is a kind of forced disease, resulted from long-time staring at one place; the time of blink is just one third of that normally so that decrease secretion of lubricant. It lasts for a long time will result in fatigue of eye, ghost image, and blurred vision in addition to other syndrome.

3.1.3. Damage to organs.

It is difficult to change figure, on operating computer. Speedy, singular, repeated manipulation and enduring forced position are easy to conduces to disease of musculoskeletal system. Main hurt positions are waist, neck, shoulder, elbow, and wrist and so on. The survey of American Cornell University shows 40percent students of primary schools fall into improper setting position due to work station of school's ignoring students' musculoskeletal growth.

3.1.4. Decrease of outer activity will results in decrease of functional capacity.

"media is the extension of body"[5], but relying on technical means, media intensifies some sense organ, meanwhile restricting potential ability of some human's organs. E-learning help people to break out the limitations of time and space, microcosmic and macrocosmic. The exploration into real world and face-to-face interpersonal contact will be replaced by contact of human and computer. The cost of contact of human and computer will cut down the opportunities of people's outer activities leading to reduction of people's functional capacity in comfortable time.
3.2. Autonomous learning is Easy to conduce to "Lost in internet"

E-learning can help students realize free exploration of knowledge; satisfy the need of learners, timely study and just in case, on contrary, it is apt to result in learners' aimless state following information unreasonably due to lost in sea of information. So- called "lost in internet" is lost head in face of sea of information just like navigating on the sea. "Network magical consists in a large number of random information: it is possible to fail to wanted information, but inevitable to encounter unexpected information. Network can transform easily from aimed quest to aimless wander.[6] Informational lost not only take learners' attention but also their precious time leading to low efficient teaching. There is a lot of useful information, but due to informational lost, a few of which exert influence. Some of people fall into aimless state in network activity, following information sightless. The well- known "addict to network” is a kind of abnormal reliance on network.

3.3. Virtual Studies is Easy to Alienate Learners from Real world

In reliance on nature, object and people to obtain free and higher subjectivity, [3] However, study by Virtual technology is just a part of practice of human, cannot be replaced by effect of real practice. For example, "on- line the world expo” is free and easy, but can be experienced profound feeling just like in person. People obtain knowledge of world from network information for lack of profound sense of reality different from specific reality. If we recognize the world relying on network, it is bound to take shape one- sidedness. Even on line feeling communication with less rationality is different communication from feeling in reality.

Meanwhile supposed someone is addicted to on- line life, they will gradually weaken ability of adapt ion to complication of reality. Due to wide-scale of network, high speed of high transmission, high efficiency of collection of information, human's-activity is constrained to limitation of time and space will be reduced. They usually do not aware or unnecessary to aware what their location is to blur definition of reality and virtual world. They tend to imitate virtual reality by real life who is induced too far away from real world so as to lose human's real feeling and value resulting in separating from real world. But human's substantial need and spiritual need finally be satisfied by real society, anyone should return to society problems in reality. For example, "one-line dinner” is various, line but it cannot feed up; one-line shopping can save time and sale section, but it is finally consumed when commodity is sent to customers. Therefore, learners cannot transform role of real world to virtual world, which leads to addiction to network, psychological conflict and action disorders.

3.4. Multi-medialization of studying Material will weaken Learners' Logical Ability

Intellectualization of computer is the extension of human's intelligence, which can substitute some human's logical function, and even surpass some respects of human's intelligence. Due to replacement of computer when people solve complicated object, they tend to transfer logical thinking to machine. For a long time, human's brain is not accustomed to consider carefully. For example, people discover from the effect of electro- dictionary on English teaching that students are easy to bring reliance on electro-dictionary. Conferring the meaning of new words in the light of context is an important reading skill in the process of reading, the increasing frequency of consulting words will result in decrease of guess meaning. Therefore it will decrease interaction between students and textual context to frequently consult electro-dictionary [7].

On the other hand, media relies on technology to strengthen function of some organs, meanwhile restricts potential ability of human's some organs. When students are attracted to various information of multi- media, they do human and computer of interaction in accordance with some
model and way of thought and clues predetermined, they have no enough time to consider problems deeply.[8] Especially, prevalence of network information, vivid and dynamic knowledge and information leave less room to learner's consideration. In such information environment, it will depress development of learners' abstract logical ability and cultivate logical inertness so that people lack ability of rational consideration. Simultaneously, presentation of non-linear knowledge has divergent influence on learners' logical thinking. However imperfect system of knowledge will lead to barricade to systematizing knowledge and taking shape of picture in brain in the process of collection information, sort out information.

3.5. Ultra-space and time of Contact Decrease face-to-face Interactive Action

Contact is the indispensable part of studying, efficient study has direct ratio to efficient contact, and efficient contact is based on signal system.[9] E-learning can get rid of direction of face-to-face interpersonal contact in society and limitation of activity within physical space and time to present free, initial, equality and so on of studying contact. However, in E-learning interpersonal action completely depends on development of internet, the learners who join contact study firstly face computer and network, then the object of contact. Due to absence of body, anonymity, and lacking in language clues (such as tone, facial expression, body language) it is difficult to accomplish efficient communication. Linguists come to conclusion that language action only occupies 35 percent of the whole of interaction from investigation on language action and non-language action of interaction. Psychologists also invented an interesting formula that an expression of a information = 7 percent of language + 38 percent of sound + 55 percent body movement.

Meanwhile, E-learning encourage interaction of network will lead weak of practical interpersonal action. Consequently interpersonal feeling will become faint, making the degree of personal socialization low. The scholar called No many of Stanford University claimed the time that people spend on network has inverse ratio with time of people spend on realizing interpersonal contact. Thus he doubted whether international internet will create a world of loneliness. Other professional pointed that even if teenagers have information communication with more people by network, but which cannot substitute direct interpersonal life experience, because the way of direct communication is more complicated and warmer than on-line communication.

It is conspicuous that E-learning is not like the image initial designed by people. For example since 2003 the construction of featured courses of nation, province and school are taken into practice, educational institution of each level devote support and fund and plenty of teachers and educational institutions also spend a large number of time and experience which cannot support education and satisfy students' efficient study.[10]

4. Conclusions

Above all, although E-learning has huge influence on promoting study, it is still not a perfect educational means there are still a lot of intractable problems. It does not matter E-learning import advanced technology, it cannot substitute face-to-face communication between teacher and students and practical activity, mention less education of thousand-year of human' history. [11] We should take it into consideration of the effect of E-learning on education, in addition, pay attention to the negative effect of it in order to avoid strange circle of educational technology claimed by Richard E' Mayer enormous anticipation on educational revolution that is fulfilled frontier technology large-scale proved come to dead end after tens of years. [12] Of course, aim of this paper is not ignore positive effect of E-learning on educational
field by pointing the negative effect of E-learning cannot deny. It just objects the radical favor and unpactical proposal.

REFERENCES


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Mortaza Mokhtari Nazarlou received his B.Sc. from Islamic Azad University, Tabriz Branch in software engineering and currently he receives M.Sc. from Islamic Azad University, Shabestar Branch in Computer science. Also, he is lecturer at Islamic Azad University, Urmia and Maku Branch. His main research interests are Petri net, software testing, Colour Petri nets, verification and validation, E-Commerce and E-Learning.