The Application of Blog and Benchmarking-Digital Divide in education and Future Strategies

RONG-JYUE FANG\(^1\), HUNG-JEN YANG\(^2\), YAO-MING CHU\(^3\), CHI-JEN LEE\(^4\), 
*HUA-LIN TSAI\(^5\), DAI-HUA LI\(^6\)

\(^1\)Chair Professor, Department of Information Management, Southern Taiwan University of Technology, Taiwan  
\(^2,3\)Department of Industrial Technology Education National Kaohsiung Normal University, Taiwan  
\(^4,5,6\)Graduate student, Department of Industrial Technology Education, National Kaohsiung Normal University, Taiwan  
*No.188, Zhong yi St., Fengshan City, Kaohsiung County 830 Taiwan, 

Abstract: A new star, blog, in digital learning times will be the most convenient method in the learning. The problems of benchmarking and digital divide have to urgently improve to strengthen the condition that students learn actively and raise education effect. Blog, this newly arisen dissemination influence, is coming. Bill Gates, Microsoft chief executive officer, says Blog becomes the fourth network killer application, except three big service networks,"E-mail", "BBS" and "Instant Messenger". The school education is starting a reform tide, containing like "school organization reconstruction","school-based management" and "school accountability" and so on. The benchmarking learning will be a quite important key factor. The benchmarking learning emphasizes quality management, keeps on improvement, and achievements promotion ...etc..These all will affect education reform. The newly arisen subject in "digital divide" has caused great concerns overseas in recent years. If the speed of information handling is slower than the others, the progress will fall behind in any ways. It will make the learners who are not able to acquire equal information sources be more placed in the position of bad situation.

Key words: blog, benchmarking, digital divide

1 Definition of the blog:  
Blog is abbreviated from the weblog. The log means the record files which are produced by operating the computer. Web-log comes up purely according to the wording the explanation, being called “the network record files”. It presents personal daily record with a kind of web page form. Russ Lipton said that weblog is one of the websites which reorganizes according to the time order. Weblog does not represent the new concept of the humanity communication. It can be traced back to the earliest diary in the ancient Greece or other civilizations [1]. In brief, blog is to provide users flexibe operation interface, making two elements, the network and users, make the result by chemical effect.

1.1 The difference in blog and bbs and personal homepage  
Nowadays blog, bbs and personal homepage are not easy to be differentiated. The reason is the pattern of blog is various, and it is hard to categorize. Blog and bbs mainly have three different respects, like text structure, relations in texts and reader aim-like [2]. The structure of blog’s text is more complex comparing with BBS. The daily record of blog is more cautious, detailed and complete. The different texts of blog website usually aims at different topics originally. The blog has fully used the website to entrust with individual issue information which seeks to use in common. This is different from BBS. The characteristic of blog comparing with personal homepage is mutual connection.

1.2 The characteristic of blog  
(1) Title: The headline can shorten the inspectional time, and be convenient for the other people to use adduction (2) Post or Entry: Each post contains content writing or picture of carrying blog (3) Link: Blog has a sharing psychology, linking to an another blog, news
web page and contents of news source etc. (4) Date or Timestamp: The blog tool system which is differed from a general web page can record down that using time or date (5) Archives: The blogger can set the way of index page that the inside draft headline arranging in order, and collecting the entire file (6) Permalink: The general home page of blog can be correctly quoted from by the others, renewing continuously, and using a permanent link address only.

2 Application in education
The blog seems a made-up web page, and it doesn’t need to think how to establish layout of printed sheet. Because it has been disposed, it only needs to change the page layout which you wants, then you can dispose the article or the picture which you want to issue in the network.

(1) Promote communication and observation between the students and the teachers. (2) Increase an administration efficiency, and promote school popularity. (3) Reduce a Mars text, and promote writing technique. (4) Establish a study file by blog. (5) Construct study social group, and share knowledge, and create knowledge.

Blog, the personalized digital media, is very popular currently. Blog owns simple and instant functions, and can let teachers and students be quickly used for announcing with communication. Blog lets the teachers and the students be able to build up teaching file and learning file respectively. In the future teaching application, blog can construct more complete study social group.

2.1 The meaning and function of benchmarking learning
The definition of the benchmarking learning has no explicit definition until now. [3] Think the benchmarking learning is a kind of process. [4] Bendell and the other co-workers think the benchmarking learning is an mindset to look for improvement, and it modifies process evolvement. [5] point out the benchmarking learning is a kind of method in the outside principle. In summary, the so-called benchmarking learning is one kind of improved process which is endurable and systematic. First, we should confirm “the most high benchmarking”, and next make up “the benchmarking learning team” simultaneously to designate “the benchmarking learning partner”, finally adopt “the improved strategy”.

2.2 The function of benchmarking learning
(1) Raise productivity and achievement: Benchmarking learning adopts the good operation modes and results which performed by other excellent organizations, letting the organizations be able to understand operation and success experience of other rivals [6]. (2) Promote the learning between organizations: Contributing to an organization learning through benchmarking learning can reduce many unnecessary false results. (3) Urge the organizations to improve continually: The organizations continually investigate and improve, and can establish the system which improves continually and enhances the product service quality. (4) Satisfy the need of customer: Benchmarking learning by change and innovation of process raises the service quality of product, and promotes organization results to satisfy customers’ need. (5) Help the organizations establish a target: Benchmarking learning can help organizations to carry on the work that the target is established. (6) Maintain competitive power: Benchmarking learning usually describes the vision of "the most high standard", helping organizations to change an existing dilemma. (7) Change organization culture: Change and establishment of organization culture are the key whether benchmarking learning can success or failure. (8) Improve work flow: "Flow" is one of the items of evaluating standard learning. Approaching the best organizations to study the work flow can improve the organization internal structure and the operation flow [7].

2.3 The categories of benchmarking learning
Differentiated by comparing with the goals: (1) Performance benchmarking: Performance benchmarking aims at result evaluation and comparison of enterprise or organization. The purpose of performance benchmarking finds out the key factor which can promote an enterprise or organize efficiency and effect. (2) Process benchmarking: Process benchmarking aims at processes such as built-up programming, design,
operation, quality control and examination etc.. The goal lies in improving work flow. 

(3) Strategic benchmarking: Strategic benchmarking is the best built-up strategy of comparison and evaluation. 

(4) Cost benchmarking: Cost benchmarking is the standard which treats cost structure as a kind of comparison and evaluation. The purpose of cost benchmarking is to reduce the cost of production of organization, and to examine built-up productivity and the direct cost structure. 

(5) Customer benchmarking: It is a main target for customer benchmarking to shorten the expectation divide of customer. The most importance is how to satisfy customers’ need, and let the organizations build up a good customer relation.

Differentiated by comparing with the objects: 

(1) Internal benchmarking: Internal benchmarking compares with the department, the unit, the subordinate company or the country in the same company or the organization. The advantage of internal benchmarking is to acquire data easily. The operation of internal benchmarking is more convenient. 

(2) External benchmarking: Exterior benchmarking mainly is to learn “the similar organization” in external environment. The organization must have suitably “the similar”. 

(3) Competitive benchmarking: Competitive benchmarking mainly compares with best competitors or “direct rival” which makes the same product and provides service on effect, product, service, process or result. 

(4) Functional benchmarking: Functional benchmarking mainly compares with the competitors of the same industry and the technique realm or the non-competitors on a workflow or special function. 

(5) Generic benchmarking: Generic benchmarking means that no matter any organization or industry used own characteristic or the workflow as comparative foundation. In other words, the attention is focused on the outstanding work flow or organization's common part.

2.4 Benchmarking learning to enlightenment of education

(1) The benchmarking learning contributes to promote in school effect. 

(2) The benchmarking learning contributes to model a learning-type organization. 

(3) The benchmarking learning contributes to improve current education evaluation system [8,9,10].

3 The definition of digital divide

“Digital divide” may be defined as: in the information society, a person influenced by the external environment and other background factors causes the difference and unbalance of adopting information in the three respects, using opportunity of information of science & technology, using the content of information of science & technology and information accomplishment. It caused the social unfair phenomenon.

3.1 The content of digital divide

(1) Use the opportunity of information of science & technology: (a) The equipments of information of science & technology / service popularization rate 

(b) The Internet location 

(2) Use the content of the information of science & technology: (a) The goal of network usage 

(b) Browse on an information content type 

(c) Search information strategy and source 

(d) Perplexity of network usage 

(3) Have the good information accomplishment: traditional literacy, media literacy, computer literacy, network literacy.

3.2 Reduce digital divide in accordance to the Strategies

(1) Allocate specific budget for information science and technology appropriation [11]: The information ability and cultivated manners of school-children are highly related to the equipments of technology and information science. The government, therefore, must focus on this to make it well accommodated. 

(2) Combine community resources [12]: If government and educational concerned parties can combine community resources, and provide information equipments to improve the phenomenon of digital divide.

(3) Construct an educational environment which each class has computers connecting to the Internet: Making or arranging the chance to let more students touch the information of science & technology. It can contribute to improve the phenomenon of digital divide. 

(4) Provide chances for students to operate equipments of information of science & technology [13]: The teachers can make use of information equipments well to let
school-children have more chances to get in touch with the information of science & technology. (5) Guide the students to make good use of network learning resources, and carry out the information of science & technology to integrate teaching[14]: Carrying out the information of science & technology integrated teaching will be able to promote the chance and content of information of science & technology for the school-children usage.

4 Conclusion
Blog is the popular digital media for network currently and owns simple and instant functions which can let teachers and students be quickly used for announcing with communication. Blog lets the teachers and the students be able to build up a teaching file and a study file individually. In further teaching application, blog can construct more complete study social group.

How to take outstanding school as the benchmarking of learning is through continuous innovating, improving and surmounting oneself and the rival to become an educational circles model[15]. Therefore, in the school educational reform, the benchmarking learning contributes to promote in school effect, to model a learning type organization, and to improve current educational evaluation system. It is more important to make the school be able to expand mind and open visual field, and to work on a learning actively and continuously, and to model a good outstanding school organization culture. It should be worthy of expectation.

Information of science & technology provides a more efficient learning method and choices, but the E-learning does not cause the remaking situation of the unfair social class which is "strong one getting stronger; weak one getting even weaker" and the unequal phenomenon of the education opportunity. Based on the social justice and the fair principle, the government and the correlation units should take the responsibility, and devote together in building"have no the barrier" the space of E-learning. It is an explicit direction to balance development of city and countryside and to guarantee the right of each school-children for receiving an education.

5.Further research
Further effective arrangement of the Blog that the interface as well as effective organization of content for successful e-learning environments. Many research reports appear the key limitation of blog for digital content delivery of learning objects is the small screen that is available for effective display.

Therefore we must thinking about how arrangement and reduce information on the small screen, not just resize some objects from the newly arisen subject in "digital divide" has caused great concerns overseas in recent years. If the speed of information handling is slower than the others, the progress will fall behind in any ways. it would be considering about perception and visual of human interactive with blog. Because that may is the key for successful mobile learning.

References
[8] Yang,ZG., Discusses BLOG and in the education application shallowly, E-Soc Journal, NO.65,


[12] Bao, Dao-Ming, Take competitive benchmark in grading law weight service quality, the customer degree of satisfaction and the back coupling tendency - National Cheng Kung University Hospital as the example. Master paper from Department of Industrial and Information Management in Cheng Kung University, has not published, Tainan, 1998.

