Abstract—The use of the internet as education media is expected to provide alternative solutions for problems related to education process (limited learning) in Indonesia, such as the physical distance between students’ house and education institutions, the high education cost, and limited time for studying. One of the strategies which can be implemented to access education is by developing computer-based instructions and computer-assisted instructions as an alternative of learning in various education institutions. The internet-based or internet-assisted education system is a technological curriculum model in which individuals can access education easily and inexpensively. One of the generated innovative products which is expected to contribute to the performance improvement in education and considered as being appropriate for the Indonesia culture is blended learning strategy. Although the blended learning strategy employs information and communication technology, it does not ignore the philosophical values which become the objective key of education. The attitudes, knowledge, and skills of students are proportionally represented. Therefore, a careful reconstruction of the learning system needs to be done in relation to the three domains.

Keywords—learning; communication and information technology; blended learning

I. INTRODUCTION

The science and technology, especially information and communication technology has developed rapidly. This matter has influence by the existence of internet connection technology and universal search protocol that known as the world wide web (www) with all the tools and applications that enable collaborative activities and information sharing widely without being obstructed by region and time [1].

The potential of the prospective information and communication technology since 10-15 years ago has given effect for the various aspects of human life, including education [2]. Then, the concept of learning that implement of information and communication technology using various of the terminology such as standalone courses, virtual classroom, embedded learning, blended learning, mobile learning [3], networked learning, computer-assisted learning, web-based instruction, computer-mediated learning, online learning [4].

Some of these concepts refer to learning assisted electronic technology that known as e-learning. In the context of e-learning, one of interesting trends to be applied is blended learning concept.

These are 3 documentations of the meaning of Blended learning by Graham, Allen and Ure: 1) A combination of learning strategies, 2) A combination of learning methods, 3) A combination of online learning and face-to-face learning [5].

II. METHODOLOGY

To direct the implementation of research, the formulation of the problem is focused on the following research questions:

- What is the strategy for implementing blended learning in instructional activity?
- What is the example of blended learning model that can be applied in the future learning?

The researcher will get description about the implementation of blended learning based the formulation above.

III. RESULT AND DISCUSSION

A. Implementation Strategy

Blended learning is used to describe a learning situation that combines some learning methods that aim to provide the most effective and efficient experience [6]. That mean can be a combination of several types of learning technology, such as videos, CD-ROMs, films, or the internet with face-to-face
learning that by Singh’s concept is blended e-learning (2003) [7].

So, the most following important thing related to the implementation of Blended Learning are; 1) curriculum design, 2) design of online sources, 3) learning strategies.

Uwes A Chaeruman explains that the important problem of implementing blended learning not in the using of information and communication technology but in designing a combination of the application of information and communication technology for the learning process by Littlejohn’s concept is called a design of blended e-learning [8].

B. Examples of Blended Learning Models

Haughey proposes for developing Blended learning based of Internet; 1) Web Course Model, 2) Model Web Centric Course 3) Enhanced Course Web Model [9].

Based on the possibility of developing blended learning is how to combine the application of appropriate information and communication technology (blended learning design) for the learning context.

In the context, Uwes recommends using the concept of 4 quadrant learning settings according to Noord and Staley about the classification of learning strategies according to Smaldino et al, and the standard of learning processes in the context of e-learning environment [8].

Fig. 1. Implementation blended learning for instructional activity [8].

The picture shows that a blended learning is a concept to introduced by the distance learning community as an effort to utilize synchronous learning activities, such as face-to-face interaction with instructors and collaborative peers as an asynchronous learning activity complement by learning participants [10].

The same reason by Psikurich who explains that blended learning is a combination of components from synchronous and asynchronous learning aspects with the aim to reach learning effectiveness [11].

According to some definitions, the concept of blended learning focuses on a combination of synchronous learning and asynchronous learning activities. Blended learning is a design of learning system that combines between synchronous learning and asynchronous learning activities to achieve instructional goals.

IV. CONCLUSIONS

The following three prescriptions for the teacher and schools in choosing the appropriate blended learning model; 1) Facilities and infrastructure that access to internet networks, 2) Teacher’s ability, 3) Access and ability of student to computer and the internet.

REFERENCES