DISTANCE LEARNING IMPLEMENTATION STRATEGIES
FOR HIGH SCHOOL IN INDONESIA

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Abstract

Distance learning or e-learning to be one of the world's most popular method of learning, this is because e-learning allows a student to learn anywhere and at any time, but the application of e-learning can't be implemented well in Indonesia, this is because the policy of face-to-face in classroom and obstacles to the facilities and high cost.

From some of the constraints faced emerging a prototype of the concept of learning that combines face-to-face and distance learning, known as blended learning, combined with mobile learning facilities intended for distance learning more accessible for students and teachers, just use mobile phones or smart phones students and teachers can make learning easier, cheaper, and is not limited to space and time.

Keyword : blended learning, mobile learning, e-learning, distance learning

1. INTRODUCTIONS.

Education in Indonesia is mostly done by traditional methods, especially high school, conducted by face-to-face learning between teachers and students, one kind of traditional method is lecture method, lecture method is a combination of the methods of recitation, discussion and question and answer. Lecture is a teaching method where an instructor is the central focus of information transfer. Typically, an instructor will stand before a class and present information for the students to learn. Sometimes, they will write on a board or use an overhead projector to provide visuals for students. Students are expected to take notes while listening to the lecture. Usually, very little exchange occurs between the instructor and the students during a lecture.

Lecture method have a advantages, Advantages of the Lecture Method is, Wide area of studies can be covered within a short time, Large population of students are taught at once by a single teacher, It saves time and energy of the teacher as he can say one thing to the whole students at the same
time instead of single individual.

But the disadvantages is It is a teacher-centred method of teaching, It kills students' initiatives as it makes passive listeners, It does not cater for the individual differences of the students. This is evident in the sense that the students are taught by the teacher a the same speed as a whole group.

Lack of time to meet with teachers and lack of role of parents in helping the process of learning, making students must work harder outside of school. follow courses and tutoring is a top choice of parents to help their children learn outside of school. but not all parents are able to do so, it is because of the high costs they spend.

Today's education world is growing, with the information technology we more creative use of technology in learning, distance learning or e-learning is a kind of learning method using information technology, **E-Learning** means "electronic learning" — it refers to a wide range of applications and processes designed to deliver instruction through electronic means. Usually this means over the Web, however it also can include CD-ROM or video-conferencing through satellite transmission. The definition of E-learning is broader than, but includes, "online learning," "Web-based training," and "computer-based training." Most importantly, it signals the paradigm shift in education and training that is in progress.

E-learning (electronic-learning) system is a new concept on Indonesian's high school education system. Not all high school already implemented this technology in order to improve the acceptance of teaching material on every subject materials. This paper will discussed about strategies to implementing e-learning for high scholl in Indonesia.

2. ABOUT E-LEARNING.

eLearning is a term that means something different to almost everyone who uses it. Some use the term to refer to packaged content pieces and others to technical infrastructures. Some think only of web-based self-study while others realize eLearning can encompass real-time learning and collaboration.

Almost all agree that eLearning is of strategic importance. Almost all also agree that eLearning is an effective method that should be blended into a corporation's

Current learning mix. eLearning refers to the use of internet or wireless technologies to deliver a broad array of training solutions. eLearners access the learning from a computers via the internet or an intranet, or through a hand held device like a palm pilot. In 2001 Marc Rosenberg suggested the following definition of eLearning: "the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance." (p. 28). In less than two short years this definition has expanded to include wireless as well as internet technologies with the two technologies often working together to delivery focused learning to the job-site.

We are all familiar with classroom-based learning (cLearning) which is face-to-face group learning led by an instructor or subject matter expert. In eLearning environments learners interact with learning materials, their instructors and other learners from various locations and often at various times using network technologies. So by its nature, e -learning offers significant flexibility as to when and how learning occurs. E-learning can include independent, facilitated, orcollaborative approaches to learning. Independent learning refers to each individual learner completing learning activities or modules on their own, in their own environment, on their own schedule. The learner is independent of a facilitator and the other learners. This does not mean that the learner does not have access to other resources such as a facilitator or coach, but the learner is in control of whether they contact them, when they contact them, and for what.

2.1 Types Of e-Learning

There are four categories of e-learning, and three types of e-learning, which could apply to the four categories. The four categories are:

1. New information – this is generally passive learning. The Learner will simply receive and read the information, which may be up-date from time to time.
2. Knowledge Transfer – this requires some participation by the Learner, who will read, listen (if there is an audio component), and answer questions.
3. New Skills – this will involve more participation. The Learner will read, listen and try out the new skills, and will then be assessed for progress made.
4. Certification – this is the highest level of e-learning, because there is an examination at the end of the course, and a certificate awarded.

The three 'types' of e-learning are:

1. Traditional: these courses have depth of content and preparation, and are usually produced by experts, and to give the Learner a real understanding of the subject.
2. Rapid Self-directed, also called Asynchronous. This is usually related to one specific aspect of the subject, and the courses are produced rapidly and liable to change. The Learner works at his or her own pace. It could be based on CDs, DVDs, Networks, Intranet or Internet and may include access to instructors through bulleting boards or discussion forums.
3. Rapid, controlled, also called Synchronous, because it is conducted at set times, for example in phone-ins or internet classrooms. It is conducted in real time, with a live instructor. All Learners log in at the prescribed time and can speak to the group under the control of the instructor, by raising a cyber hand. The course may last weeks or even much longer.

Implementing e-learning

To implement e-Learning, there are at least three components of e-Learning, that is:

1. E-Learning infrastructure, which can be a personal computer (PC), computer networks, internet and multimedia equipment.
2. System and application of e-Learning, the system software to virtualize the conventional learning process includes how management class, material or content creation, discussion forums, assessment system, examination system and all the features associated with the management of the learning process.
3. E-Learning content, that content and learning materials in the e-Learning. Content and teaching materials can be shaped based multimedia content or text-based content. E-Learning Content used to be stored can be accessed by students anytime, anywhere.

2.2 Problems Of Implementing E-Learning In Schools In Indonesia

Development of e-learning in Indonesia quite rapidly, along with the development of IT in Indonesia, but the use of e-learning is currently only used in universities, although not all universities implement e-learning in the learning process.

Implementation of e-learning in Indonesia have a bottleneck, especially when e-learning is implemented in the school environment, obstacles include three main components that have e-learning

1. E-Learning infrastructure

   Constraints that occur are not effective in all learning using computer media. A lot of learning is more effective when done in a cooperative or collaborative

   Besides the availability and feasibility of E learning infrastructure itself. Glittering reality, not all schools have the hardware to run the e learning, as well as the university is not feasible for all devices used for learning e learning.

   The main constraint is when an educator delivering learning through E learning so students should use computers and the internet to receive but not all students have the proficiency level equipment in his home. Learners who do not have got a problem and had to go to the internet cafe to use e learning and it adds to the cost of learning.

   Constraints of learners who have not been able to operate a computer as well as the teacher. E learning in certain areas can not be applied because not all areas have internet access.

2. System and application of e-Learning

   E learning system that can smoothly virtualize conventional teaching and learning process. Often referred to as the LMS or Learning Management System that where there is a classroom management, manufacturing materials, discussion forums and assessment system and online examination system.

   For existing features likely was designed to meet the needs of distance learning, but there are restrictions or regulations that must be met, which is not contained in the e-learning applications.

   Another constraint is, quickness an admin personnel who can operate e-learning, as well as experts who are used to maintain e-learning and needed a trainer to train teachers and students to use e-learning.

3. E-Learning content

   E-learning content consisting of text and multimedia electronics requires a fairly skilled in making these learning tools, foundry materials in electronic form at school learning takes time and skill alone is not currently owned by a teacher within the school. Besides e-learning content is also accessible through a device that has a high specification such as a computer or laptop, so it cost money to access it.

3. E-LEARNING STRATEGIES

A learning strategy describes the input, output, and measures of the system, and should have organizational, departmental, business unit, and individual references. This should be a far-reaching

document that details how the organization is going to facilitate continuous improvement in its

employees. It implies a focus on the development of a learning culture.

through three key components to achieve this goal :

1. Capture and creation of data, information, and knowledge assets in support of each individual's performance functions across the organization. Provide links to knowledge management and document management practices.
2. Intelligent storage, leveraging useful taxonomies, and search and retrieve capability that better manages and improves access to content.
3. Dissemination and access practices, including but not limited to: e-Learning, instructor-led training, documentation, mentoring and coaching, and outside sources.
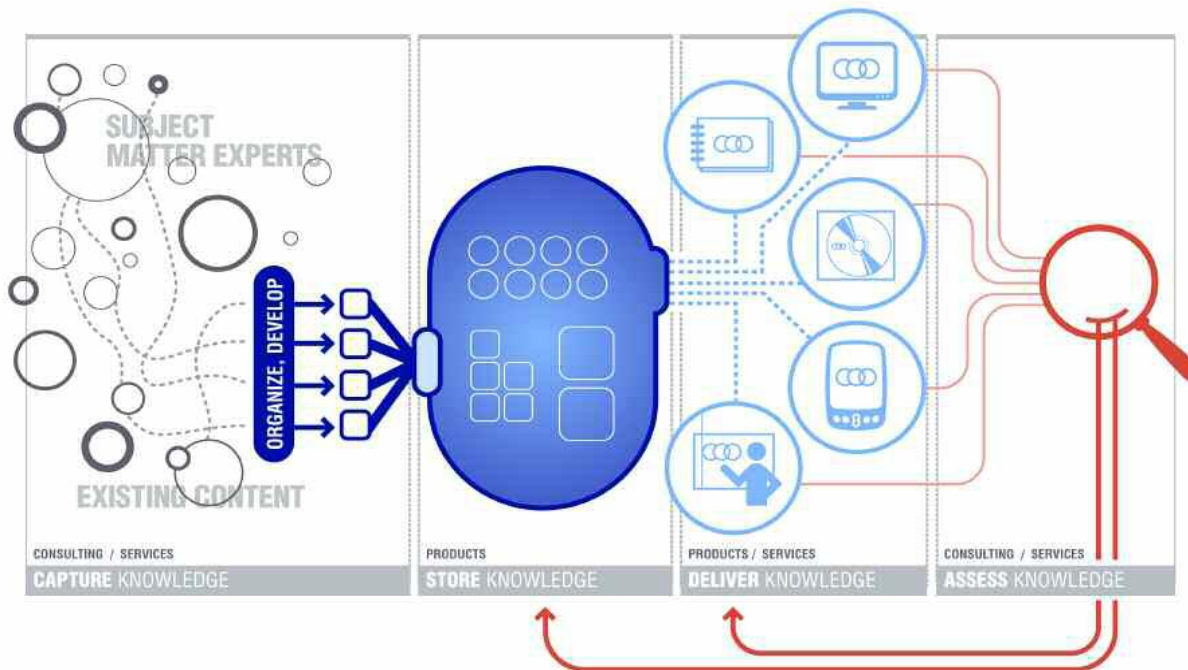
Fig 1. Learning and performance systems

Four key design strategy decisions that e-Learning designers and developers should consider, and the criteria for considering them. They include deciding whether [3]:
• instruction or information is needed;
• face-to-face classroom, online, or real life approaches will work best;
• synchronous or asynchronous instruction makes the most sense;
• a traditional or rapid design approach should be used to build the materials.

Solution E-Learning infrastructure
1. Using cheaper devices making it possible to have at all.
2. Using a device that can be easily operated by both the students and the students.
3. Using a device that does not rely on the existence of the internet.
4. Developing e-learning on a mobile device.

Solution for System and application of e-Learning
1. LMS is used to support the devices that are mobile.
2. Using an easy to use LMS.
3. Using the LMS can be used offline
4. Conducting training and training on the system

e-learning Content
1. The existence of a team tasked to create e-learning content that match the subject matter of teaching.
2. Creating learning content in the form of multimedia that can be used on mobile devices.

In addition we need a mechanism that combines classroom meetings and learning support mechanisms are not only in the classroom, such as e-learning and blended learning known, but the need for additional tools to overcome problems and others, including mobile learning

Blended learning concept
iNACOL, the International Association for K-12 Online Learning, defines blended learning as "combining online delivery of educational content with the best features of classroom interaction and live instruction to personalize learning, allow thoughtful reflection, and differentiate instruction from student-to-student across a diverse group

of learners." In a similar vein, the Sloan Consortium, an institutional and professional leadership organization dedicated to integrating online education into mainstream education, describes blended learning as part online and part traditional face-to-face instruction.

San Diego State University also offers an interesting perspective on blended learning. In the university's online Encyclopedia of Educational Technology, the article Blended Learning Solutions notes, "…blended learning combines the engaging benefits of traditional instructor-led training with the advantages brought by a variety of technologies to create an optimum program."4 The article also underscores that many "ingredients" can comprise a blended learning model, including instructor-delivered content, e-learning, webinars, conference calls, live or online sessions with instructors, and other media and events.[2]

The term blended learning has become ambiguous. According to Dr. Margaret Discroll, blended learning is defined as a combination or mixing of at least four different methodologies, including:
• Mixing of technology-based learning (e-learning, collaboration, virtual classroom, etc.)
• Combination of pedagogical approaches (behaviorism, cognitivism and constructivism)
• Mixing of forms of instructional technology (face-to-face, Internet, CD-ROM, etc.)
• Integrating instructional technology with actual job activities
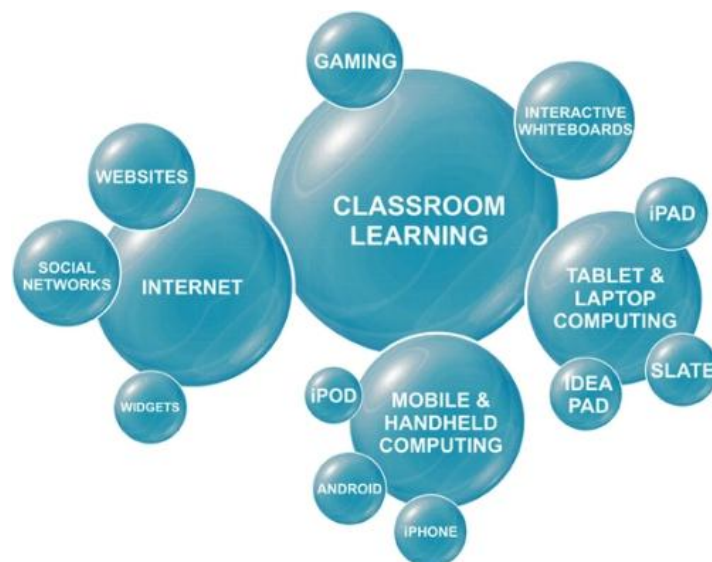

Fig 2. Blended Learning Concept

Fig 3. Blended Learning Component

Wherever student meets technology, there exists a potential for learning. With the ability to access material from the web, mobile phones, tablet PCs, using media such as apps, podcasts, and video, educators can leverage these technologies to extend their teaching through multiple modes of information dispersal.[1]
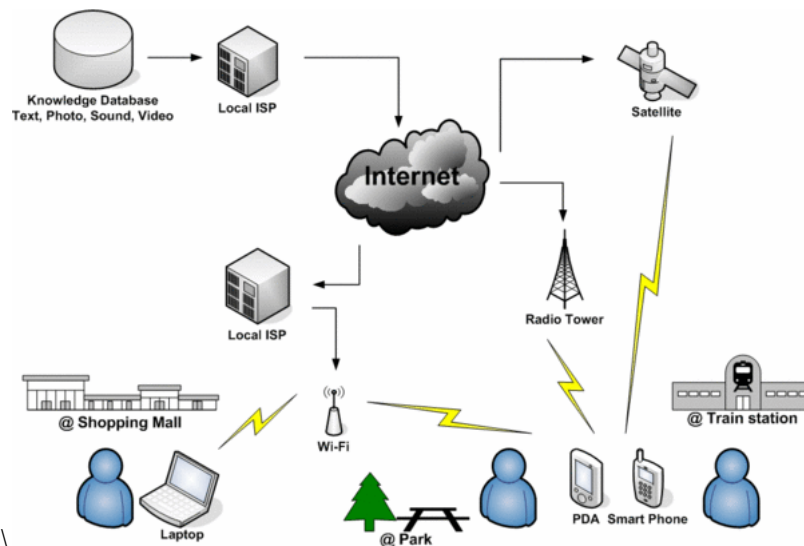
Fig 4. Blended Learning Component

This mix of learning across a combination of media and devices is known as blended learning. With the right combination, an innovative learning experience can be designed to enable students to learn more effectively.

According to Larry Ragan , "Best Practices in Online Teaching", a blended learning course's aim (from a pedagogical perspective), is to combine the best of classroom face-to-face learning with online learning experiences, enabling:

- An increase is **learning outcome measures** and lowering of attrition rates vs. fully online courses (Dziuban, Hartman & Moskal, 2004).
- An opportunity for students to practice technology skills in navigating online course materials and possibility creating digital content for assignments.
- An increase in student-instructor and student-student interaction through the use of course-communication tools like, discussion forums.
- The ability to reserve face-to-face time for interactive activities, such as higher-level discussions, small group work, debates, demonstrations, or lab activities.

From a student perspective, the appeal of blended learning includes:

- Flexibility of schedule: learn any time, anywhere.
- Control: students have some level of control over the pacing of their learning. Difficult concepts can be reviewed as often as necessary.
- Convenience of an online class with many of the social aspects of a face-to-face class.

Blended learning gives learners and teachers a potential environment to achieve more, through a greater reach and accessibility of educational material.

4. CONCLUSION.

Blended learning that combines the application of mobile learning and e-learning is expected to help the learning process, associated with the lack of facilities owned by schools and individuals involved in the learning process.

Face to face, accompanied with the use of technology to support teaching and learning activities is expected to increase student interest, due to the presence of e-learning and mobile learning students can learn anywhere, anytime, with a selection of facilities that can easily get by students and teachers.

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