CYBERWELLNESS LEARNING RESOURCES DEVELOPMENT IN LEARNING

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ABSTRACT

Developing applications cyberwellness learning resources to help learning innovation and provide security of access to learning resources, using the concept of the concept 1) k ontinyu, 2) Convergent, and 3) Concentric. Research method development and measures to construct applications cyberwellness learning resources that implemented in learning. The result of the development of results valid with details 1) design validation of learning and the layout of the application in the network is 91.6%, and 2) validation of content 87.5%.

Keywords *cyberwellness learning resources, continuous, convergent, concentric*

A. INTRODUCTION

Teaching methods in one direction, it can not provide the maximum learning outcomes for student learning. Adi (2007) explained that the instructional media innovation can be realized by improving the ability of the lecturers, the use of digital learning resources, internet, and virtual media, to allow integrating technology and educational resources to assist learners in the learning environment. Chen (2004) explained that learning needs to be supported by combining the use of ICT (Information and Communications Technology) with ICT characteristic preparation of students, curriculum and learning environment.Yan, Lo and Wang (2009) explained that blended teaching combines e-learning and face to face teaching by combining virtual learning with classroom meetings, and focused guidance and autonomous learners, will derive optimal benefits in learning. Sigh (2003), the use of time in the online learning provides a natural and flexible means to acquire knowledge. So that ICT is the most logical means to develop the ability of students when accompanied by the preparation of learning model that has the concept of a superior education.

Implementation of ICT in learning has become increasingly easy, accommodating, since the advent of Web 2.0 technology (web site that is designed to realize the 2-way communication) and technology "cloud" of the Internet. According So & Kim (2009), learning program partly using ICT and based only on skill alone is not possible to prepare a student to learn how to deal with the problem of pedagogy complex, content management, and technology (So & Kim, 2009). According to Wang & Woo (2009) web 2.0 has been recognized as an efficient technology to support and enhance the learning strategy of collaborative learning. this shows the urgent need to revisit the assumptions that underlie

what we mean by competences ICT required for lecturers environment College, and then, for redesigning related learning models involving ICT in education program university students.

Mastery of knowledge and procedure utilization of ICT has been recognized as a significant and fundamental factor contributing to the implementation of ICT in learning. Chang (2003), Chang and Tsai (2005) and Chien & Chang, (2012) explains that in order to effectively improve the learning outcomes of students through ICT, students need to understand the interaction between the use of ICT, teaching pedagogy, students ICTcharacteristic, and features resources Study abroad , So that every use of ICT can be successfully requires a comprehensive understanding of the mutually reinforcing relationship between technological knowledge, pedagogical knowledge, and knowledge content. Application of ICT in learning have a procedure that must be understood by students, namely: 1) how the subject matter may be established by the ICT (knowledge of content and technology), 2) how teaching and learning can be changed by ICT (knowledge of pedagogical technology and karakteris ICT), and 3) how to represent and communicate the specific concepts and topics of the subject matter to the students (pedagogical content knowledge).

Lecturer competency standards in the modern digital era are they must know how to utilize ICT to improve the planning of learning, teaching, assessment, and classroom management. The underlying concept of the development of students according kuswandi (2009) are the values of education, culture and community leadership Indonesia is integrated with the concept of Continuous, Convergent and Concentric. Utilization of ICT is basically 1) agreed on a cultural exchange should be carried out continuously with the natural culture of students, 2) learn to converge towards the cultures were obtained to realize the universal culture, 3) building a community that is synergistic and together realize the culture concentric with diverse cultural realms. Utilization of ICT without Continuous concept, Convergent and Concentric will result in the student losing basic foundation of the development of the values of education, culture and the leadership of Indonesian society.

The debate on the essential and fundamental requirement for students in order to reframe an instructor with a capacity of ICT usage is from the perspective of membership and acceptance of the technology. According to Bransford and Schwartz (1999), the expertise can be used to explain the differences between novice learners with learners who have expert. It can measure the progress and the importance of developing how to transfer knowledge and skills. Hammerness, Darling-Hammond and Bransford (2005) showed that the development of expertise involves two-dimension of expertises, namely 1) the dimensions of efficiency and 2) the dimensions of innovation. Dimensions efficiency means greater ability to perform

certain tasks without having to devote too much attention to the resources to achieve the goal. Hammerness (2005) states that help a lecturer become an expert requires three aspects of preparation. 1), lecturers need to help see the process of learning, 2) help students to teach more effectively. So do not just think as a lecturer but also know how to give understanding. students need to engage in reflective practice where they have the opportunity to practice and reflect on their own implementation in various contexts (Schön, 1983, Kim & Hannafin, 2008).

Cyberwellnes is an ideal conditions in a community of learners in using the on-line well and gain the benefit optimally. According Grosseck (2009), cyberwellnes marked with Web 2.0 is emerging as an important technology. The existence of this technology allows web into social media interaction, collaboration, knowledge sharing and creation, examples of web 2.0 including Facebook , wikis and blogs. Research has shown that adopting the tools in Web 2.0 learning can improve interaction and communication between faculty and students of this matter by Cheon research, Song, Jones & Nam (2010) and Hartshorne & Ajjan (2009). Therefore, to integrate web 2.0 tools in the learning of students need to be more emphasized. Additionally, web 2.0 tools need to be implemented on strengthening the profession of students in the areas of learning in order to improve the effectiveness of teaching in Higher Education. Sharples, Graber, Harrison and Logan (2009) surveyed 206 professors at while pursuing a profession of lecturers who teach children aged 11-16. lecturer analyzed their reactions about the issues of Internet security used by children with Web 2.0. The researchers found that about half of the faculty have been involved students in activities the use of Web 2.0. However, 42% of professors-teachers never teach students about safety online and only 11% do the teaching on-line security. In addition, 46% of the teachers reported that they had negative experiences caused by students using web 2.0. Problems cyberwellness actually carry a moral message culture wise and safe. This was shown in the study, Chou and Peng (2011) reported that the education faculty at the age of 16 receive training in e-learning models feel more comfortable about choosing and utilizing resources. Thus, some lecturers and managers need to be aware wisely and safelythat cyberwellness is an on-line culture. Students mostly have not yet received any support or sufficient condition cyberwellness in acquiring knowledge through education concepts at universities as far as now.

Developing applications cyberwellness learning resources could help learning innovation but provide access securityto learning resources. The application uses the device integration of ICT with the concept of continuous, convergence, and

concentric. cyberwellness application useful learning resources to divert and filter out harmful content done by the students and replace them with specific learning resources and useful on the network access the Internet at college.

Development of cyberwellness learning resources applications for the managers of Higher Education became into a strategic policy. In addition to obtaining optimum benefits in the learning process, students can gain experience, technical knowledge when integrating the learning. Student 1) get the opportunity to exercise their creativity in designing instructional materials in various forms both on-line and off-line. 2) students get knowledge melaksanaakan innovative learning model and comfortable; 3) students can also feel the effectiveness of learning from learning model; 4) Students can learn the attitude of learning with the rules cyberwellness the learning model.

Cyberwellness learning resources applications is the usagebridge for media of information and communication technology. Applications of cyberwellness learning resources requires a strengthening of the concept of continuous education, convergent and concentric used to reduce the adverse effects that accompany technological culture. College students and managers are still not aware culture kebudaayaan cyberwellness as an on-line community that is capable of using ICT integration wisely adan safe. Students mostly do not receive any support or sufficient condition cyberwellness in acquiring knowledge through concepts of learning in Higher Education this time. The concept is concentric to the students is to strive to adopt a more focused dimension of efficiency and innovation expertise dimension.Kuswandi (2005: 173) states that the concept 1) k ontinyu, means continuous and sustainable learning must maintain the culture. 2) Convergent, selective and adaptive means having the ability to integrate culture that follows the technology that is deemed good for the capabilities of learning. 3) Concentric, meaning toward the unity of world culture to continue to have the personality traits of each nation in the world.

B. METHOD DEVELOPMENT

Research using methods developed. Development undertaken to construct applications cyberwellness learning resources. Method of application development is a development that combines learning with learning resources. Model Davidson-Shivers and Rasmussen is a development method which is preferred because it has a dominant karakteris ICT on the development of web-based.

Method of learning resources cyberwellness application development performed in conjunction with the design of web-based learning 2.0. the phases of development among other things: 1). Analysis;2). Evaluation Plan 3) Phase Unison covering design, system development, testing and implementation and evaluation Formative. This phase can be done Arm times until the time limit is not specified; 4).Thorough implementation; 5). Evaluation. Development steps

1. **Analysis** . Process analysis system envisaged impact on application design process cyberwellness learning resources only and does not affect the overall learning design. The process of needs analysis and instructional design is not a sequential process, but the process of analysis gives effect to the application design process cyberwellness learning resources.

Analysis

Evaluation plan

Design

Formative evaluation

Floating

Implementation trials

Summative Evaluation and Research

Full imple-tion

Concurrent design

Development Model application cyberwellness learning resources and instructional design adopted from Shivers and Rasmussen

2. **In the design of the evaluation** , web developers specify the application of formative evaluation instruments cyberwellness learning resources at the same time. The process of designing evaluations have an impact on the formative evaluation process. The design of the evaluation is the phase of planning matters relating to the evaluation of learning resources cyberwellness application form and formative evaluation. Determination of the effectiveness of the instrument cover (effectiveness), efficiency (efficiency) and attractiveness (Appeal). Tim Experts and Practitioners. Student web users.
3. **Design Unison.** Design Unison is a patterned activity in the application development process model cyberwellness learning resources interlocked circular. In the application

development process cyberwellness learning resources and instructional design is a continuously step that consists of:

3.1. Planning activities , activity planning stage of the application development cyberwellness learning resources and instructional design.

3.2. Process Design . In the process of an investigation into the specification, design objects, the drafting of the assessment, or better known as the Objective Assessment Task Item Blueprint (TOAB).

3.3. Process Development , Process application development cyberwellness learning resources can not be separated from the process of testing, formative evaluation and design process. This process is a learning product formation activity. To be considered a good product, the development process is done more than once. This means that other processes also experienced repetition.

3.4. Trial Implementation . This phase is conducted trials to run applications cyberwellness learning resources in a web based blended learning.

3.5. Formative . Formative evaluation is the evaluation of applications cyberwellness conditioned learning resources at the time to start designing the application development time learning cyberwellness web-based learning resources.

4. Implementation Process Integration , Implementation Process applications *cyberwellness learning resources* and learning as a whole to do anything when the input of several experts considered completed

C. RESULTS DEVELOPMENT

1. Results of Context Analysis System Cyberwellness

Context of the development is to build a system that can assist in the implementation of learning for students. Learning activities and learning has received karakteris ICT in the learning environment off-line (class meetings, consultations, discussions on specific issues, etc.) and with ICT characteristics environment in an on-line learning (learning forum general, group forums, public discussions, group discussions, space learning material documents, presentations through delay, etc.). So it is necessary to develop a model of cyberwellnes system for the management of internet access for those who meet the elements :

- **Interactivity:** Mahasiswamaupun service manager utilizes communication services. So that students feel comfortable. Supplied interactive communication facilities between managers with prospective teachers.
- **Independency:** Regarding the place, time, access time teaching material to be flexible. Buaka as extreme freedom without limits. Freedom in question is to provide accessible teaching materials which students are directed and are provided as well as more oriented to students, so that students more active in sorting and selecting learning resources that have been categorized as safe.
- **Accessibility:** Using the access management technologies, many sources are easily dicapai.Dan lecturers provide learnings for students who need assistance in local content.
- **Adaptivity:** Students are given the facility in the web so that students adapt to the system used.

2. Implementation of Application Cyberwellness Learning Resources

This model is appropriate when given at the beginning of the meeting the learning system or for the new material. In the initial learning lecturer usually do not know the student mastery over substance courses that it holds. This model is efficient in terms of execution time, but time interaction between students and students or lecturer become slightly.

The model consists of five steps, namely the presentation of the material by the lecturer, group discussions, giving tests / quizzes, the implementation of the cross asked to build capacity, and stabilization by lecturers.

Table Matrix Implementation initial phase

ACTIVITY LECTURER	MHS ACTIVITIES
• Prepare and provide learning resources Given before the meeting took place on the web • Presenting the subject matter of the course off-line	• Leveraging resources online learning resources through a system of interconnected prepared • Listening dish lecturer
Have discussions / group work off-line	• Provide ideas, experiences and ideas that come from science and culture of the individual • Summing up the meeting

Conducting tests (assessment) and interaction in the form of cross asked to students	• Mengiikuti test (assessment) and the cross asked
Reflection provides group	Follow up

This model makes each student is actively involved. Each beraktualisasi through interaction, involvement, and characterization arranged together between faculty and students.

Table Matrix Core Implementation at Class

Event Lecturer	**activity Mhs**
Individual activity • Setting up the On-line material in the form of teaching materials • Assign individual activities • Monitor Activity Through On-line System	• Conducting independent activity through a system of on-line learning and face-to-face classroom • Accessing actively through interconnection system • Sharing via interconnection system • Accessing local content and content on the Internet
Group Activity Model 1 • Setting up the On-line material in the form of teaching materials • Establish a working group • Establish a working group • Guiding Group	• Sharing tasks within the group, each member of the group focus on reading and reviewing different things appropriate roles and duties of each. • Conducting share in the group despite working of each individual
Model Group Activity 2 • Monitor the activities of on-line discussions and models realtime blog • Guiding the student group discussion • Guiding individuals in the group	• Choose the group members based on student • Sharing tasks within the group, each member of the group focus on reading and reviewing different things appropriate roles and duties of each. • Conducting share in the group despite working of each individual
• Giving the task to students in the form of individual tasks and task groups has been following evaluation	Tasks and evaluation
• Provide reflection classes	Follow up

The model stresses the responsibility of learning in students . This model is more highlight the individual skills or the ability to work in groups. Model strength lies

in the high interaction, both between lecturers and students and students with a student. To be able to do things like that, students must study confirmed previous sections through the things that have been performed and recorded in the system on-line learning. This model may be applied if the student does not have the readiness.

Model On-Line Self do when learning has taken place several times so that the student has mastered many important concepts about the course and a variety of questions that may arise.Students should be aware that the consequences of unpreparedness, respectively delays the learning process. So unpreparedness of one individual should be solved by a system of sharing and policy encourages lecturers to share.

Implementation Matrix Table Final Stage

Event Lecturer	**Student activity**
Providing identification / summary of the material that has been in there on learning resources that already exist in the web	Looking at the source of learning and following the activities of identification materials,
Giving the task in the form of group and provides guidance	Discussion / working group to review the problems, find the answer / solution, and build reports for presentation
Receiving the results of student groups in the form of presentations and reports Manage the online discussions	Presenting the results of group discussions
Providing reflesi to discussion	Providing follow-up activities

3. Results Interconnection System Design The design of the application

INTERNET

INTRANET

In general interconnection system on the network depicted in chart 12

MAIN SERVER

BACKUP SERVER

LOCAL CONTENT SERVER

HUB AS A SERVICE ACCESS STATIC
LECTURER

COLLEGE STUDENT

SPACE ACCESS TO STUDENTS
SPACE ACCESS LECTURER
SPACE ACCESS MANAGER
ELEMENTS AND LEADERS
ADMINISTRATOR

- **POLICY**
- **NETWORK**
- **LEARNING**

WIFI ACCESS POINT AS A SERVICE ACCESS TO MOBILE
Interconnection CONTROL DEVICE

Chart Systems Interconnection

explanation Chart

= Priority interconnection lines
= Priority lanes and special permissions

= Device is a priority and supported by power storage device (ups)
= Common interconnection lines

The design of the interconnection using the interconnection control system intended as a form of convergence step realizing how science or as an effort to help find a culture of learning and teaching. The system controller can help:

- Students need to reconstruct their perceptions of teaching and learning in order to learn and adopt new ideas from the world of the Internet.
- Students need to engage in reflective practice where they have the opportunity to reflect and share the things that is accessible on the internet in a variety of contexts

4. Validation Results

Validation System is run by intranet and internet format for a limited circle. The system is run on the local model and the mini router to access a limited number. The access is executing the research, a team of technicians and students involved. The results of testing the system has run well in limited community

VALIDATION ITEM LAYOUT	RESULTS (%)
Accuracy , clarity, ketersampaian Learning Objectives	100
Accuracy , clarity, ketersampaian Bjarahan A	75
Increasing activity , reflection, and learning implementation	100
Access Technology capabilities , web site content, designaccess	100
Relevance , the attractiveness, design and navigation with the wishes of students	75
Relevance , the attractiveness, design and navigation with the wishes of lecturers	100
TOTAL	9 1.6
VALIDATION OF ITEM CONTENT	RESULTS (%)
Clarity and accuracy	100
Clarity and achieving goals	100
Ketersampaian objectives and contents approach	100
Completeness of the content on the web	100
Alignment to the needs of learners to Fill	75
The level of understanding of the content	75
The level of ease in reflecting on the goals and objectives of learning content.	75
Ease of access technology of the material or by the user	75
Technological capabilities to accommodate the contents of the website	100
The ability to express content	100
Ease to perceive content	100
The relevance of information to the user desires	75
The attractiveness of the pad is the information content of learning	75
Comfort on the information content of learning	100
The attractiveness and ease of navigation	100

The attractiveness designed with a web-based media	75
The attractiveness of the information is designed with media presentations	75
The attractiveness of the information is designed with media-based electronic learning	100
Speed access time delivery of information to achieve goals	75
Understanding the speed in the delivery of information and communication to achieve goals	75
Are the contents quickly and clearly to be understood	100
Completeness, accuracy software	75
Optimization of technical level Capability	75
The level of attractiveness of the performance of opensource	75
The level of attractiveness of the visual design and messages Opensource software for the operating system level	100
Opensource software acceleration level	100
TOTAL	87.5

Results of Trial Limited

D. CONCLUSION

The results provide development and layout design validation results are 91.6% and 87.5% content validation. Overview of these results is Developing a learning model in integrating ICT In cyberwellness With the concept of continuous, concentric convergent and web-based open source platform. Applications cyberwellness learning resources with instructional design and system design interconnection provide cultural impact cyberwellness positive . So that development can be done for the next stage. Assessment needs to be done on all the elements and aspects, so that it can be obtained as a guideline for decision making in developing on-line learning system is full.

E. DISCUSSION

Development into the next stage needs consideration and assessment of some aspects that is not less important, among other things:

1. Gains form of descriptions of the extent to which the system will benefit the institution, faculty member, administrators, and especially the benefits to be obtained intranet to improve their quality when compared with the implementation.
2. The cost of infrastructure development and procurement of equipment and software. The cost required to develop the infrastructure, equipment and software do hold elections carefully taking into account the region's facilities. For that to consider things like whether to build a network of fully or gradually, whether it will conduct a completely new equipment or her upgrade existing ones. Also need to note that the original software (not pirated) are quite expensive or election against Biya opensource with system development. For it's ability to provide funds need to be taken into consideration in the decision.
3. The operational costs and maintenance. A system will run if it is managed well. Similarly, the web-based learning system required operational and maintenance costs are certainly not small. While the cost of maintenance including replacement of parts that were damaged either due to age and use of procedural errors, as well as the calculated result of natural disasters
4. Human resources. To develop and manage networks and learning systems, required a number of human resources with competence and integrity. In this case, including lecturers should understand the principles of teaching through the intranet web-based and blended. So the first step is to identify the human resources and then prepared the personnel. To equip these workers should be given training, for it needs to be taken into account long-time training, the training and how the training to be produced qualified personnel.
5. Students. A component or entity that is not less important to note. The need for analysis to determine the extent of readiness of students in participating in learning activities with an intranet that will be held. If development is something new for most college students, of course, need to do a series of attempts to condition so that they are ready to participate actively in the new teaching system. It is not easy to change the habits of those who have been used to learning in the conventional face to face over the years, which certainly has been a learning style or habit.

RESOURCES

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