

STRENGTHEN THE LEARNING OBJECT THROUGH MASSIVE OPEN ONLINE COURSES (MOOCs)

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Abstract

Entities learners to access learning resources digital or non-digital with limited scope. MOOCs an opening restrictions of use Suber learn . Explanation MOOCs need to be assessed from a brief history and discuss their evolution, it is useful to understand what exactly MOOCs and what makes it different from the similar systems, in particular online learning and open educational resources (OER). MOOCs as sumber study was to construct learning object over the material just to read. MOOCs cause learning resource has the ability to support learners .

Keywords: *learning objects , learning resources, MOOCs.*

PRELIMINARY

Reinforcement learning is done by the elements of educational technology to enhance the learning experience (Leber, 2012). Learners has been commonly used source of learning such as lectures online and experimental digital to prepare for their classes, and use the meeting for interaction within the group. Wiley (2000) revealed confusion with the understanding associated with the term "learning object". the same is obtained from Quinn (2000) , revealed that he was still struggling with the operational definition of learning object . IEEE defines a learning object as an entity, digital or non-digital, which can be used, reused or referenced during technology supported learning (LSTC, 2000). This definition means learning object can be a document or software components are provided in a technology supported learning environment. The view is definitely expressed by Frank Farance on LTSC meeting (10 th August 1999) in which he describes the learning object as a result of the association assets of learning (learning resources that can be reused) with LOM (learning object metadata). He made the point that the learning object is not an object as defined in object-oriented programming.

The term learning object in kkomputer based learning apply a three-part definition: learning objectives, a unit of instructional who teaches the purpose, and one unit of assessment that measures the goal. (L'Allier, 1998) limit the definition of NETg This makes learning object being a passive or merely "material reading" including the possibility that the object enables interactive learning and require computing support. NETg learning objects to further limit special class resources. Quinn (2000) , taking input from Lian and Schuyler, indicates that a learning object must have at least four subcomponents: content, functionality, learning objectives and the 'look and feel'.

Another vendor CBT, Asymetrix, defines the characteristics of the learning object in terms of programming: "ToolBook II learning objects - pre-scripted elements that simplify programming and provide momentary power programming". (Asymetrix, 2000) NSF taking a technical approach, only accepting Java Applets as learning objects. (EOE, 2000) There seems to be a definition of the term because of differences in the use of LOM.

In addition to the various definitions of the term learning object, other terms which imply a common intention and object-oriented approach to computer-assisted instruction. SCORM [SCORM, 2001 # 205] uses the term "object content". David Merrill uses the term "object of knowledge" (Merrill, Li, & Jones, 1991). Merrill has written books on the topic of object-oriented approach to instruction for the so-called "Component Learning" (Wiley, 2000), which is sure to introduce again another term: "instructional component". ARIADNE project uses the term "pedagogical documents" (ARIADNE, 1999). Software NSF funded (Escot 2001) project using the term "educational software components".

Multimedia Education Resource for On-Line Teaching (Merlot) Learning Project and referred to them as "online learning materials" (Merlot, 2000). Apple Learning Interchange simply referred to them as "source" (ALI, 2000). Finally, Ip used the term "virtual devices" to refer to an independent educational components that can be combined on a web page to make learning interesting educate. (Ip & Canale, 1996; Ip, Canale, Fritze, & Ji, 1997; Ip & Canale, 1997b; Fritze & Ip, 1998). On the other hand, there is no reference to the term "learning objects" at all in the IMS Content Packaging specification (v1.1) (Young & Riley, 2000).

Many authors (eg, Mason, Adcock & Ip, 2000) have used a metaphor to describe the building blocks LEGO Learning Objects. LEGO metaphor to convey the idea "small pieces of instruction (LEGO blocks) that can be assembled (stacked together) to some of the larger learning structures (castles or spacecraft)." (Wiley, 1999). Wiley expressed his reservation on the metaphor LEGO when he observed that the random combination of learning object may not necessarily produce learning materials and not all learning objects can be combined together. Wiley, Gibbons, & Recker (2000) introduce the notion of "atom" as a metaphor for a while atom is the smallest unit under the laws of chemical combination, not all of the atoms can be combined to produce a molecule.

The first courses labeled as MOOC 's (Mass i v e Open Online Courses) created and taught by George Siemens and Stephen Downes, two well-known pioneer of online learning in Canada. Siemens and Downes share an interest in education and learning model . A filiation refers to learning theory called connectivism. Siemens is the leader of academic leading, while Stephen Downes in particular has a long experience as practitioners of e-learning, initiatives in OER, learning's private i. MOOCs merupakan latest step in the global trend of the growth of online learning. This is seen in all parts of the world, both developing and developed. Consor tium Sloan Survey of Online Learning in United States (Sloan, 2013) showed growth of 1.6 million online students in the United States in 2013.

LEARNING OBJECT OF PARADIGM pedagogical

Paradigm pedagogical gives an indication of the width and breadth of technical problems learning object. The paradigm of pedagogical a marsh to understand the issues and reuse learning objects virtually in the design of the learning environment. Environmental study provides a mechanism to present the problem to the learners online and provide feedback depends on context of learning . When designed with the right, a feedback mechanism can support the model of higher education (Laurillard, 1998).

Learning object in this context (Fritze & Ip, 1998; Fritze & McTigue, 1997) is a richer environment for drill and practice to enable learners to interact with input /

output and visualization tools. Learning components can be reused and is a resource that determines the chart and software components that act as input / output and visualization tools. Software components, (Kennedy, Ip, Adams, & Eizenberg, 1999; Kennedy, Ip, Eizenberg, & Adams, 1998) are also units that are reusable and requires software to use and interpret resources.

MOOCs AS A LEARNING OBJECT

MOOCs in the last 3 years that MOOCs has expanded globally, and became the institution's profile education providers . MOOCs emerged from an experiment long and sustained with the theoretical basis of educational technology , online learning, and with the approach of pedagogic that allows for learning. I novate technology MOOCs have been replicated many times since to create a model established and well understood are being used all over world.

There is no shortage of new terminology and acronyms in the field of educational technology, and many of the terms are used interchangeably, or with slightly different meanings. The use of the most common terms that are relevant in terms of Educational Technology is the MOOCs are summarized below:

- Technology improve the learning of electronic or e-learning: any technology used to support learning experience. In general use the internet, electronic boards and polling system active in e-learning technologies and learning systems such as virtual learning environments or learning management system, which relies technology to deliver content and connect with learners in collaboration .
- Online learning: learning that takes place online using internet technology. A condition that rely on e-learning system in many cases.
- Learning resources : licensed digital content so that it can be used for the purpose of national education by persons other than the owner of the content. License and may vary widely and the inclusion or defined more narrowly, for example, only allow or not to use the resources. OER is also supported by an international movement that aims to create an increasing number of digital content available for free, in the public interest.
- MOOC s : Online Courses certain publicly available for the number of learners are unlimited, free. It is also a form of online learning and MOOCs using the theory of technology education in order to function. They can also use OER as a primary source of content.

MOOCs have the following characteristics:

- Masiv : MOOCs intended to be run on a scale, with hundreds or even thousands of participants and no limit to the number of students who apply.
- Open: MOOCs are intended to be open-with the word "open" is used to imply that access to MOOC is free and also that access to MOOCs not restricted. MOOCs have no entry requirements and is open to learners of all educational backgrounds, age, and location.
- Online: MOOCs are delivered entirely online and does not involve face-to-face contact. They are delivered through Internet technology and makes it easy for

- students to communicate with each other while learning and for students to access the resources available on the web where so on.
- Courses : One of the key attributes that distinguish MOOCs of open educational resources is that they have the characteristics of a traditional course-they run during a specific time period, based on specified content, and instruction given to learners over a period of time. As with traditional courses, there is also usually included in the MOOC element of judgment, and this may include some form of accreditation (which is a thorny topic and one which we will return later).

TYPE OF LEARNING TO SUPPORT MOOCs

Learning Objectives

Goal-based scenarios is basically a simulation where there are problems to resolve, or the mission to complete. They require learners to play a major role in solving the problem or pursue their mission (Schank, 1997; Schank, 1990). Therefore, the aim in this context refers to the success of completing discharge of duties. Information and knowledge in the form MOOCs very necessary to achieve the goal .MOOCs can be either a video clip with resource persons speaking as a model (see Schank and Cleary, 1995). Goal-based scenarios are used to motivate learners and also provide the learners the opportunity to learn by doing, or even make mistakes, and to receive feedback.

Role-Based Learning (Simulation Game)

Simulation game is a situation where learners take on roles / specific character . For example in the form MOOCs educational game to learn. (Linser, Naidu, & Ip, 1999) As a result of the simulation role-play, learners are expected to acquire the intended learning outcomes and make learning fun. While the underlying belief simulation game similar to the scenario of learning -based objectives .However, distinguishing are differences in both the dynamic nature of the objectives during the process and mechanisms in support of learning.

Problem Based Learning

Problem-based learning is an instructional approach emphasizes authentic and solving problems in context. Using a problem in learning as something very principle. Analysis and study of this issue consists of several phases spread from the period of group work to individual learning (Barrows & Tamblyn, 1980; Schmidt, 1983; Evensen & Hmelo, 2000). A typical (eg Liu, Williams, & Pedersen, 1999) that based on the theory will be:

- 1) Put the problem in the context of a rich and allows learners to engage in scientific inquiry as experts do;
- 2) Present a problem with complexity, but provides tools to support learners in working with complexity;
- 3) Provide information in a multimedia format to allow for dynamic and interactive presentation that addresses different learning styles and needs of learners;
- 4) Provide expert guidance 'from various perspectives to facilitate the acquisition and transfer of knowledge; and

- 5) Stressing the interconnected nature of knowledge. P better teaching refers to the use of problem-based strategy issues in an environment of learning supported kolabora si, so face-to-face between the participants is not important.

The problem, as the object of learning, is MOOCs with specific learning objectives. However, these learning objects should be associated with the learning object tangible MOOCs in order to create a rich context for the problems that have complexity and authenticity for learners and fully engaged .

Learning-Based Exploration

Learning to use exploration allows learners to direct their own learning. Through the process of the invention, or discovery guided, learners learn the facts, concepts, and procedures. (Department of Education , 1993) The pedagogical foundation is closely related to the rule-based simulations. The difference is the focus of exploration. In a rule-based simulation, limited exploration in the simulator and the challenge is the creation of a simulation. To learn exploration, the focus is on information or resources in the form of MOOCs . In an environment of traditional learning, information available to learners (eg children at school) have been carefully selected, edited or reworked to meet the "duty of care" and learning profile of learners. conventionally p erpustakaan will play an important role in the process of learning. However, with the advent of communication networks, resources, including those that were not initially taken into account for education or for minor consumption, the enabling available to learners during the learning exploration. (Ip & Naidu, 2001) highlighting the need of rethinking the issue of availability of materials for the purpose of evaluation.

MOOCs AS A TOOL COGNITIVE

Reeves, (1999) shows the two main approaches to using interactive learning systems and programs in the field of education. First, people can learn "from" interactive learning systems and programs, and second, they can learn "with" interactive learning tools. Learn "from" interactive learning systems are often referred to in terms such as computer-based instruction or integrated learning system (ILS).

Learning with learning tangible object MOOCs as interactive software, are very similar to the term a lat cognitive expressed Lajoie (1993) ; Jonassen & Reeves, (1996) on learning environment constructivist. By using MOOCs sebaga cognitive tools like it, learners can enter an intellectual partnership with the computer to access and interpret information, and organize personal knowledge. MOOCshave deliberately adapted or developed to function as intellectual partners to enable and facilitate critical thinking and higher order learning.

Typical cognitive tools including databases, spreadsheets, semantic networks, expert systems, concept maps, communication software such as teleconferencing programs, on-line collaborative knowledge construction environments, multimedia / hypermedia construction software, and computer programming languages. Learning objects need software that supports learning. (Kennedy et al, 1999 ; Kennedy et al, 1998) that serves as a cognitive tool.

MOOCs BASED LEARNING ENVIRONMENT

MOOCs Based Learning Environment emphasizes the transformation of meaning through learning centered on learners, the system is facilitated . MOOCs Based Learning Environment need to support and expand efforts to know, understand, and produce, namely, to reflect, build, troubleshoot, and integrate new information for the purposes itself (eg, curiosity, cognitive dissonance) as well as for other purposes (eg, research topics, gain varied perspectives on an issue, troubleshoot assigned) (Land & Hannafin, 1996). They not only provide a comprehensive collection of data that is indexed, information, and search engines, they help learners to reason, reflect, and judge the truth of the system.

CONCLUSIONS AND DISCUSSION

There is the obvious gap between the technology community learning and education community. Results Identification of potential use MOOCs in some paradigm pedagogical imply that MOOCs is the terminology bari of the term "learning resources" or "learning objects" earlier , however, it must be admitted that it does not affect the concept of learners in the learning environment . Issues reuse, grain size, technical nature or even the basic question "what is MOOCs ?" Is not a central issue in the community pendidikan. Dalam past few years, there are "external" environmental changes (eg, see Ip & Canale, 1997a) that forcing many educators to work in a digital learning environment.

While learning technology community is struggling to understand the issues in the educational community, they also create a new term to try to summarize the new insights but use the term technology . For example, the term "learning object", borrowed from object-oriented. MOOCs may not make sense to the educational community that teacher is still the main source of learning .

Learning information retrieval should look at learning and pembelajaran, the material must be read, focusing on identifying the sub-structure of the material is for example purposes, the level of competence , kababilitas etc. So that other issues such as financing, maintenance etc. need to be ignored

To make it easier to understand the learning object as MOOCs needed some statements, among others:

- Learning object specifically written literature (for example in the case of the case method of teaching, problems in problem-based learning)
- Learning object in the reading materials originally created for other purposes (eg, web-based initial scenario simulation game, learning resource exploration and resource-based learning)
- Multimedia resources that are used to supply content and deliver authentic situations and a sense of authority (eg video clips used in basic learning)
- Resources structured designed for use in some interactive behavior (items in the tutorial, drill and practice)
- Resources that require special software is structured in order to work within the context of educating meaningful, such as specific questions in the analysis of the text object (TAO), which also acts as as cognitive tools.

The function is provided by the software MOOCs necessary to take resources structured / unstructured and provide interactivity in educational settings.

I identifikasi and recognition of the needs of MOOCs in the paradigm of pedagogical is different, thus forcing us to re-conceptualize the meaning that

underlies the idea of learning objects and questioning the relationship between the technology community learning and community technology education. Potensi reuse of learning resources from the paradigm of pedagogical a form filing MOOCs.the approach and a clear limitation of liability subject matter experts, instructional designers and software developers, will empower educators to create MOOCs more innovative.

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