Developing a learning management system for Critical Literacy course: A need analysis

Mengembangkan learning management system pada mata kuliah Critical Literacy: Sebuah analisis kebutuhan

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ABSTRACT
In preparing the students to have the ability to interpret texts using critical lenses, to challenge the power relations within the messages and communicate actively in multimodal context, there is a need and urgency of the hybrid learning process to take place. As part of multi-years' research and development which aims to develop digital module and Learning Management Systems (LMS) for the students, this preliminary needs-based research focuses on the students' and lecturers' perceptions regarding the need for developing LMS in the Critical Literacy course in Bachelor of English Language Education, Universitas Negeri Jakarta. The research participants were thirty-two students, and a lecturer who responded to questionnaires, interviews to lecturer, and focus group discussions. The research data was the students' needs based on Hutchinson and Water's (1991) theory which could be divided into target needs (necessities, lacks and wants) and learning needs. The study was conducted with the qualitative approach with the Successive Approximation Model (SAM) which focuses on Preparation Phase research design. Throughout the information gathering and the Savvy Start, the phase rotated through needs analysis and library study. The results demonstrate that there is a gap between the expected outcomes of the Critical Literacy course and students' ability to understand various texts, especially in understanding the interpretation of data in the form of graphs, tables, and numbers. Also, students need exposure to various texts such as news items, critical analysis of texts, and current issues in education. While the difficulty experienced by lecturers when teaching is that students' language skills (especially reading) are very varied. Also, the lecturer and students want Critical Literacy material that makes students think critically about topics related to critical literacy theory, strategy, and its practice. The preferred activities in this course include debates, discussions, criticizing social campaigns, advertisements and short films, and topics on digital literacy. By this, developing a ready-to-use digital English learning materials that correspond to the students' and lecturer's is exigent.

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ABSTRAK
Dalam rangka mempersiapkan mahasiswa untuk memiliki kemampuan menginterpretasikan teks dengan menggunakan kemampuan berpikir kritis, menantang relasi kuasa dalam pesan dan komunikasi secara aktif dalam konteks multimodal, terdapat kebutuhan dan urgensi agar proses pembelajaran hybrid dapat berlangsung. Sebagai bagian dari penelitian dan pengembangan berkelanjutan yang bertujuan untuk mengembangkan modul digital dan Learning Management System (LMS) bagi mahasiswa, penelitian tahun pertama berbasis kebutuhan ini berfokus pada perspektif mahasiswa dan dosen berkaitan dengan kebutuhan pengembangan LMS pada mata kuliah Critical Literacy di Prodi Pendidikan Bahasa Inggris, Universitas Negeri Jakarta. Tiga puluh dua orang mahasiswa, dan seorang dosen mengisi angket, melakukan focus group discussion dan wawancara dengan dosen. Data penelitian adalah kebutuhan siswa berdasarkan teori Hutchinson and Water (1991) yang dapat dibagi menjadi kebutuhan target (necessities, lacks and wants) dan kebutuhan belajar. Penelitian dilakukan dengan pendekatan kualitatif menggunakan Successive Approximation Model
Introduction

Critical thinking approaches and digital literacy are important issues that are supported by Higher Order Thinking Skills (HOTS). Critical thinking approaches have replaced the learning model that only focuses on the ability to read and write, further, these skills become very important because students need to interact with more information media and filter all information so that they can choose useful information. Considering that language is a tool for conveying ideas and information, classroom learning must also be equipped with critical thinking skills and digital literacy that enable students to become critically literate individuals.

The integration of technology and learning materials supports the improvement of learning outcomes (Yang & Walker, 2015), develops higher-order thinking skills (OECD, 2001), and increases participation and cooperation ability (Reeves et al., 2005) and teacher creativity in designing teaching and learning strategies (Chan Lin et al., 2006). Through the integration of technology and learning materials, higher-order thinking skills (Rodriguez-de-Dios, 2016) can be strengthened, as well as students’ creativity and independence to learn. Materials that stimulate fun learning can improve students’ reading skills within the framework of knowledge acquisition (Rogier et al., 2020) and equip students with the ability to "read to learn" instead of "learn to read" (Wharton-McDonald & Erickson, 2017).

Hence, when used appropriately, technology can also create meaningful learning environments that are active, constructive, authentic, and cooperative (Koh, 2013). Moreover, Antoro, Boeriswati, & Leiliyanti (2021) found in their study that the students’ reading score in the 2000 PISA survey was the same as in 2018. The findings have underlined the urge to enhance the student’s literacy competence. To accelerate a meaningful English learning process, both in developing student critical thinking and digital literacy, the materials need to be developed with multimodal coverage of texts and multimedia formats (Mayuni, et al. 2020).

With the wider the spread of the internet and the birth of learning technology in the form of learning management systems and digital modules has emerged and has an impact on the ease of accessing learning materials. The demand for teaching materials based on learning management systems and digital modules that can be accessed
through gadgets is undeniable. Currently, there are many interactive student-centered learning activities available and authentic materials provide a meaningful experience in solving problems (Land & Saul, 2003, p.65).

21st century students must have a lot of exposure to the learning process, so that they can not only understand the lesson but can also produce meaningful learning outcomes (Brown, 1992; Bell, 2010). In addition, based on the Partnership for 21st Century Skills (2009, p.1), they are also required to have skills such as collaboration, communication and critical thinking. The development of teaching materials and/or learning materials in digital form has been widely carried out in the world of schools in various parts of the world. Digital films or images are widely used in history, religion, geography and citizenship subject matter to support students' visual understanding (Hashemi & Cederlund, 2017). In Sweden, language subject matter is dominated by learning to read and write in digital form (Erixon, 2010). The results also show that digital literacy learning can develop students' critical thinking skills (Rodriguez-de-Dios, 2016), including through activities (1) validating information sources, determining the readability of information sources, and evaluating their credibility, and (2) selecting various applications that are safe and reliable. In addition, with digital learning students are not only skilled at using the internet but are also able to develop creative content and utilize technology to expand their knowledge about various things (van Dijk & Deursen, 2014).

With the COVID-19 pandemic's birth, the educational process has seen significant alterations at every level, from elementary to university. From traditional books to electronic books, in-person meetings to virtual meetings, and a wide range of new learning platforms, everything has changed. The shift of earnings that was formerly conducted offline is now carried out online with a new way of living.

A new mindset, attitude, and method of operation are required, according to Pannen (2021), to deal with this new order of life. These three factors demonstrate the need for all lecturers and teachers to use creativity during distance learning. The need to adapt to technology during the COVID-19 pandemic in the learning process is urgently needed. The development of learning modules is highly sought to stimulate students' critical thinking skills. Given the importance of developing students' critical thinking and digital literacy skills, as well as the lack of success in implementing these skills in students, there is a great need for development of digital module and LMS in teaching to encourage student literacy. Hence, the large number of smartphone and internet users in Indonesia, especially at the learning age educators have not utilized optimally to make teaching materials, learning media, and other learning applications packaged in LMS products and digital modules. Furthermore, this research is useful for discovering the needs of students and lecturers in Critical Literacy courses that foster the spirit of critical thinking and digital literacy and their impact on student learning progress. The Critical Literacy course is a new course in semester 114 (even semester, academic year 2020/2021) for the batch 2018. In the future, this course will be available for the next batch, namely for batch 2019 and batch 2020 (even semester, academic years 2021/2022 and 2022/2023).

One way to increase student interest in learning is to use technology-based learning media (Hadza, Sesrita, & Suherman, 2020). The use of technology in learning can help
students understand the material so that the learning process becomes more effective by providing examples that can support students’ understanding compared to the lecture method practiced so far. Learning media is something related to the use of real objects and visual images that are used for learning and delivered to students in which from these media, the teacher can provide stimulation so that learning becomes more effective (Jalinus & Ambiyar, 2016).

According to Martin (2006), the online teaching and learning process consists of e-learning components and four different types of interaction between students: student-content, student-instructor, student-student, and student-interface. In accordance with the statement, electronic gadgets are used in e-learning, a form of online education delivered through computer networks, to enable students to connect with one another and their lecturers. E-learning is a media technology that employs an internet connection to help the learning process, as emphasized by Horton & Horton (2003).

The general definition of literacy includes all abilities which include reading, writing, speaking and listening (Schmidt & Thomas, 2009, p.26). In language teaching, teaching literacy includes extensive use of texts (Wyse & Jones, 2001, p.54). This can be understood as a competency associated with reading written texts which includes how to read and rewrite them (Pahl & Rowsell, 2005, p.3). Freire (2005) in Schmidt and Thomas (2009, p.12) concludes that literacy is a broad barrier that can prevent those who are 'blind' from completing tasks by interpreting the relationship between language, thought and reality.

However, literacy is not only associated with the ability to understand text or written material. In basic literacy this includes all aspects including reading, writing, basic mathematics in the context of the information environment: digital, global, indexed, hyper-organized, multimedia and autonomous (Warlick, 2004, p.17). It is also agreed by Schmidt & Thomas (2009, p.226) that literacy is more than just the classic ability to read printed text, but 'both basic skills and an ever-expanding range of reading and expression'. In addition, the 'new literacies' discussed by Kress and Kist (in Tompkins, 2017, p.17) include how to read and write digitally in the form of multimedia text containing words, images, and sounds. This digital literacy mix gives students the opportunity to create innovative things by combining the principles of understanding meaning, exploring the world and expressing their lives.

The term digital literacy was first coined by Gilster (1997). Digital literacy was defined as the ability to understand and use information in various forms from a very wide variety of sources that can be accessed through computer devices Gilster (1997). This idea, which has been widely studied throughout the 1990s, is based on visual literacy (visual literacy; utilizing non-text-based imagery and images to find information), technological literacy (technological literacy; capacity to take advantage of innovation), computer literacy (computer literacy; starting with in the 1980s as a reaction to the innovation of personal computers – PCs), and information literacy (information literacy; finding, evaluating and using various information) (Belshaw, 2012). Gilster and Gilster (1997) explain the concept of digital literacy includes the ability to understand and use information from various digital sources, in other words the ability to read, write and relate to information using technology and the format in it. Hague and Payton (2010) define digital literacy as the ability to create and share in various modes and forms to
create, collaborate and communicate more effectively and to understand how and when to use digital technology properly to support the process.

The Organization for Economic Co-operation and Development (OECD) (2019) explains that digital literacy involves several interrelated literacies, namely data and media literacy or information literacy. Data literacy includes several abilities, one of which is the ability to obtain meaningful information from data, read data, work with data, analyze data and understand and interpret data (e.g., reading charts, drawing conclusions from graphs, recognizing false data or hoaxes). On the other hand, media or information literacy can be referred to as the ability to interpret information from various sources and assess its credibility by means of critical thinking. Thus, it can be concluded that digital literacy requires individuals to be able to use technological tools to obtain data that requires data literacy and by interpreting meaning through media literacy. These literacies are interrelated to assist individuals in using technological devices for various purposes to compete in today's digital era.

One of the important things to do before starting the preparation of teaching materials is to conduct a needs analysis. Basturkmen (2010) argues that learning developers must be able to identify the needs of learners by conducting a Needs Analysis. Thus, it can be determined the priority scale and the material needed by the learner. Brown (1995) defines Needs Analysis as a systematic arrangement needed to define and validate curriculum objectives. Preparation of Needs Analysis can facilitate curriculum developers, in this case teachers or lecturers, in formulating learning objectives and determining the material needed. It can be concluded from the two opinions that Needs Analysis is an activity to collect information from all stakeholders in curriculum making, based on studies and evaluation of learning efficiency based on the needs of learners and curriculum developers.

Hutchinson and Waters (1991) divided Needs Analysis into two parts, namely target needs and learning needs. (a) Target needs are all things that need to be done by learners in determining learning needs. Target needs can be divided into needs (necessities), difficulties (lacks) and wants (wants). Necessities are things that students must know in the learning targets that have been set. Lack is an analysis of the gap between the state or ability of the learner and the abilities that must be mastered by the learner (Hutchinson & Waters, 1991). Deficiency analysis can provide information about what the learner has mastered in a particular learning context. Wants are views of the needs, wants and what the learner feels. In the context of this research, the researcher explores information about the purpose of the material provided and what material students want to learn in the Critical Literacy course; (b) Learning needs are all things that need to be done by learners to learn (Hutchinson & Waters, 1991). Nunan (2004) defines needs include: goals, inputs, procedures, arrangements and roles of learners and teachers. Goals are the main thing that must be obtained from the tasks performed (Nunan, 2004). Objectives can describe teacher and learner behavior by providing a point of contact between assignments and curriculum. Inputs are everything that is used in the tasks given to students. For example, scientific journals, news articles, quizzes, videos, and so on. Procedures are things the learner does with the input that forms the learning task's starting point. Settings is the arrangement of tasks individually, in pairs, in groups or the whole class (class work) (Wright in Nunan, 2004). The role of the
learner and the role of the teacher are the objects of the tasks carried out in the material activities in the task under the instructions given by the teacher (Richard & Roger in Nunan, 2004). In more detail, the roles of teachers and learners are described by Dabbgagh and Bannan-Ritland (2005), namely: (1) The role of the teacher is as a resource, co-participant, scaffold, co-learner, moderator, facilitator, coach, monitor, and adviser and (2) The role of the learner is as a problem solver (problem solver), explorer, collaborator, goal setter, moderator, facilitator, scaffold, and participant.

Learning Management Systems (LMS) are already in place at universities around the world to help connect students and faculty without traditional classroom boundaries. LMS is an ecosystem with digital software designed to manage learning and deliver content and learning resources to students. There are four types of e-learning according to Ismail (2002), namely Learning Management System (LMS), Learning Content Management System (LCMS), Learning Design System (LDS) and Learning Support System (LSS). This research focuses on developing LMS, an e-learning system used by universities worldwide. LMS offers new methods in education and facilitates flexibility for institutions. The use of LMS itself has become a mandatory requirement in every university. LMS can also be a solution for students and lecturers in an online learning environment. At UNJ, LMS (www.onlinelearning.unj.ac.id) developed through Moodle. Moodle is an abbreviation of Modular Object-Oriented Dynamic Learning Environment developed by Martin Dougiamas. Stanford (2009) stated that Moodle was also called a Learning Management System (LMS) or Course Management System (CMS). Both CMS and LMS can be used for online learning systems. LMS UNJ has been used by Mata Kuliah Umum and Mata Kuliah Dasar Kependidikan since 2020 but has not been optimally used by lecturers in each study program and faculty at UNJ.

The main argument that adds logic to the theoretical and empirical justifications mentioned above is the institutional considerations. Using Moodle software, Universitas Negeri Jakarta (UNJ) has created an online learning platform based on Learning Management Systems (LMS). It is currently advised that lecturers at UNJ employ e-learning systems because they are more effective at giving students access to materials and homework at any time.

The current paper, which is a component of the multi-year research development, therefore focuses on and seeks to provide information on the demands of lecturers and students. The following research issues are formulated to achieve this goal: (1) What are the needs of the students and lecturer for the Critical literacy course? (2) What is the lack of students in Critical Literacy courses? and (3) What are the wants of the students on Critical Literacy course?

The objectives of this paper are to present the needs of the students and lecturer on Critical Literacy Course which cover the necessities of the institution and stakeholders, fulfill the lacks and wants of the students on the target needs.

Method
This first-year research was conducted in Jakarta with the participation of 32 students and a lecturer from Critical Literacy course in Program Studi Pendidikan Bahasa Inggris, Universitas Negeri Jakarta. This research applied in qualitative methods. The questionnaires to students and lectures, interviews to lecturer, and focus group discussions were used to collect data for this study. While the focus of the three-year study is on designing a LMS for Critical Literacy course, the Successive Approximation Model (SAM) (Allen & Sites, 2012) was adopted. The model is a recent derivation of several instructional design models which address more effective learning experiences, collaboration, engagement, iterations, and agile e-learning development processes for performances (Jung et al., 2019). The three simple yet iterative stages of SAM—preparation, design, and development—will be used to create the LMS for the second and third-year research. This first-year research focuses on Preparation Phase research design. Throughout the information gathering and savvy start, the phase rotated with a library study and need analysis as described in the following figure:

![Research Design based on SAM flowchart (Allen & Sites, 2012)](image)

This stage consists of two phases, namely library study and needs analysis: (1) Library study by searching for data and information through documents, both printed and digital (books, journals, proceedings) that can support the exploration stage and (2) Needs analysis is carried out using the concept of Hutchinson & Waters (1991) and Nunan (2004) by collecting all information to find gaps and competencies that must be mastered by students in taking Critical Literacy courses. Data was collected through questionnaires, interviews with lecturers, and focused discussion groups.

**Results**

**Target needs: analysis of needs (necessities)**

Based on the analysis of the Semester Learning Plan (RPS or course outline) document of the course outline for the Critical Literacy course, it can be concluded that the teaching materials for the Critical Literacy course developed must be able to achieve the following learning outcomes:

| Table 1: Critical literacy course outline |
COURSE DESCRIPTION
The course explores the nature of literacy, critical literacy, and its practice in language learning and teaching either from the perspectives of social practice, multiliteracies, or other multiple contexts. It provides an understanding on how to get all meanings of variety of oral and written texts in an active, reflective manner to make sense reality, understand power relation, and communicate with others.

COURSE OBJECTIVES
After completing the course, you are expected to be able to:
1. improve student’s critical literacy skills by evaluating texts and fostering higher order thinking;
2. develop student’s insights on language literacy particularly in learning and teaching;
3. expand student’s mindset about the world from multiple perspectives by engaging in a variety of tasks and language features; and
4. develop student’s self-reflection.

LEARNING OUTCOMES
1. Students are able to construct the meanings of literacy, multiple literacies, critical literacy and related terms;
2. Students will be able to analyze, demonstrate, and evaluate the core content of a variety of oral and written texts related to issues such as economy, politics, education, terrorism, globalization, information technology, project proposal, etc.
3. Students will be able to present and develop problem-based and project-based-learning activities in response to particular burning issues on:
   a. how particular norms, intention and motivation are inserted in the construction of texts;
   b. how texts are viewed from other perspectives such as from the stand points of marginalized and or disadvantaged group in terms of power relations and social inequities; and
   c. a clear scenario of feasible social actions may occur in a response to the implied intention constructed in the text.

The table above is an excerpt from the course outline for the Critical Literacy course in the Bachelor of English Language Education. There are three things that include course descriptions, course objectives and course outcomes. From the course description, the Critical Literacy course is expected to explore the nature of literacy, critical literacy, and its practice in language learning and teaching from the perspective of social practice, multi-literacy, or various other contexts. In addition, this course is also expected to provide an understanding of how to get meaning from various spoken and written texts actively, reflectively to understand reality, understand the possibility of power relations, and communicate with other people.

The results of the description, objectives and course outcomes formulated in the necessity analysis will be combined with the results of the analysis of difficulties (lack), analysis of wants and analysis of learning needs so that a syllabus can be developed that suits the needs of students who are studying the Critical Literacy course at the Bachelor of English Language Education UNJ.

Target needs: analysis of wants

Analysis of wants is a view of the needs, desires and what students feel. In this analysis, the researcher gives questions in the Focus Group Discussion about the students' needs for the Critical Literacy course material and the topics that students want to learn in that course. The responses are the students’ needs to get more learning activities regarding technology literacy, media literacy and data literacy. In addition, there
are students who want material on how to cultivate critical thinking and how to criticize articles from reputable journals. Some students want material for making argumentative writings, critical literacy for young learners and social media.

**Target needs: analysis of difficulties (lacks)**

Analysis of difficulties is an analysis of the gap between the abilities needed by students in mastering the material topics presented in the Critical Literacy course and the current abilities of students. There are students who need several repetitions in reading to the material given by the lecturer. In addition, there are students who still find it difficult to communicate their ideas and are afraid that the idea is not a critical, coherent and precise idea in terms of word choice. Some students also find it difficult when data is presented in the form of charts, tables and interprets the data in the form of paragraphs in English because it requires special terminology to interpret the data.

Apart from matters relating to basic literacy skills, there are students who still have difficulties in terms of time management or managing time to complete tasks. In addition, technical problems during online lecture meetings, difficulty focusing on learning and finding references and the level of difficulty of the material provided are also a concern for researcher to develop teaching materials in the Critical Literacy course.

**Quotation from students’ focus group discussions**

“I need several repetitions of either reading or listening to understand the material.” FGDS1

“I still have to improve my critical thinking. I also find it difficult to speak up my mind as I’m afraid my opinion or argument is not as critical as the others. My bad time management makes it difficult for me to complete tasks sometimes.” FGDSS3

“Convey orally what I want to say in a good and coherent manner. Sometimes I think of a lot of things to say, but I’m a little difficult to choose the right sentence directly.” FGDS4

“My lack of language skills makes it difficult for me when faced with the task of criticizing something” FGDS7

“When I have to interpret data, charts, tables, etc., in the form of English paragraphs. Because in doing so, special terminology is needed to interpret curves/line diagrams.” FGDS8

Furthermore, the researcher asked the preferred activity in the Critical Literacy course. The answers to these questions vary, including debates, discussions, criticizing social campaigns, advertisements and short films (visual and audio visual), discussions, and topics on digital literacy. Here are some excerpts from students’ focus group discussions:

“When (we had) online conference and brainstorming together. Where each student is asked to express his views on something, because it opens a new perspective.” FGD18

“Discussion. I am very happy when the lecturer facilitates us to express opinions on a matter, because that way I get a lot of insight from my friends and lecturers.” FGD10

The researcher also asked the students' expectations regarding the Critical Literacy course. The students' expectations are becoming a person who masters 21st Century
skills, being more critical and objective in expressing opinions and seeing things and points of view, being more critical in processing any information. The following are some excerpts from students’ questionnaires:

“To be someone that is aware of critical literacy element which I can implement it in daily life for the sake of being a wise person.” QS16

“A person who can always think critically in dealing with everything to consider the advantages and disadvantages of each side.” QS18

The next question is about the advantages of the Critical Literacy course. Students stated that lectures were carried out according to schedule and in class discussions all opinions were accepted and appreciated. In addition, students also prefer the form of class discussions in virtual synchronous meetings to discuss current issues. Students also think that they got clear and credible references, and this course improves students’ critical thinking skills through the assignments given. Below are some excerpts from students’ focus group discussions:

“This program really helped me to understand things that happened from various aspects and points of view. Incidentally, recently I read about one of my friend’s experiences on social media (one of his family members trusts news from only one source), which is related to media literacy. At that time, I immediately felt lucky because I got material on media literacy in this course.” FGD21

“Each part or chapter is very interesting, and the lecturers are very helpful.” FGD24

The next question is the weakness of the Critical Literacy course. One student thought the material was a lot and some were repeated. Then, too many kinds of literacy are discussed but not in depth, for example in the digital literacy section. However, there are also those who argue that there is a lack of meeting time to discuss the material. On the other hand, there are those who argue that the study hours which require face-to-face online for 4 hours, make the eyes tired quickly so that only a few people are actively involved in the discussion.

The last question is what needs to be done to increase the effectiveness of the Critical Literacy course. Students suggest adding more activities in delivering the material. Then they also suggest including topics and materials that match the interests of students. Students also suggest to focus on the type of literacy being studied, for example, only two or three types of literacy. Students also suggest to add more class discussions and to select interesting learning resources.

Analysis of learning needs

This part explains the results of interviews with lecturer in the Critical Literacy course. Learning needs refer to what students need to do to learn. In analyzing the learning needs of students in this Critical Literacy course, the researcher uses the task component framework proposed by Nunan (2004). This learning needs analysis focuses on investigating what students need to do to study Critical Literacy courses on task components including: input, procedures, settings, student roles and lecturer roles. The following is the data from the lecturer interview answers to the questions regarding the learning needs. The questions asked include aspects of learning objectives, lacks, wants, inputs, procedures, settings, teacher’s and learners’ roles, feasibility of current
Critical Literacy Teaching Materials in terms of learning objectives, organization, topics and methods. The following is the result of an interview with a lecturer:

**Teacher’s goals**

Based on the results of lecturer’s interview, regarding the objectives to be achieved, this course is expected to facilitate students to increase their critical literacy skills so that they can interpret various types of texts, as well as understand critical literacy as a study in language education. With this critical literacy ability, it is also hoped that it can support students' understanding of other subject texts and compose academic papers.

(1) **Lacks:** From the lecturer’s interview, the difficulties experienced by lecturer when teaching are students’ language skills (especially reading) which are very varied.

(2) **Wants:** In general, the lecturer wants Critical Literacy material to enable students to think critically with topics related to critical literacy theory, strategy, and practice.

(3) **Inputs:** Input refers to spoken, written, and visual data used by students in completing assignments. In this input dimension, the researcher provides two questions regarding input about the theme and input about the material to be taught in this course.

Meanwhile, the themes to be discussed in the Critical Literacy course are:
- defining 21st Century literacy and critical literacy,
- identifying information, hoaxes, and other related terms,
- strategies in developing critical literacy, and
- critical literacy in practice.

The input that the lecturer wants to teach in the Critical Literacy course is in various types of texts, for example: academic texts, graphics, news, films, anecdotes, audio, video, etc.

(4) **Procedure:** The procedure determines what students will do with the input that will be the starting point for the preparation of learning assignments. In this dimension, the researcher gives one question to the lecturer regarding the activities that lecturer wants to provide in the Critical Literacy course are: discussions, debates, projects, case studies, etc.

(5) **Settings:** Settings refers to the class arrangement specified or implied in the assignment and considerations regarding the assignment method. From the interview to the lecturer, in doing learning processes in the Critical Literacy course, the assignments are given in individual and group forms in a balanced way. Hence, learning in Critical Literacy courses should be in the form of virtual synchronous, virtual asynchronous, using LMS and digital modules.

**The role of students and lecturers**

Role refers to the part that is expected to be played by students and lecturers in carrying out tasks in learning as well as social and interpersonal relationships between the two. In the student role section, the researcher wants to explore information about the desired role of the lecturer in learning. According to the lecturer, in learning in the Critical Literacy course, students should act as: explorer, problem solver, collaborator, participant, etc. In addition, in learning in the Critical Literacy course, the lecturer
should act as a resource person, scaffolder, co-participant, co-learner, moderator, facilitator, coach, monitor, and advisor.

Discussion

The first discussion in this needs analysis is about the goals of students and lecturers in learning in the Critical Literacy course. Based on the data from the answers to questions through surveys and interviews, researcher can conclude that the purpose of students and lecturers in studying this course is to increase critical literacy skills so that they are able to interpret various types of texts, as well as understand critical literacy as a study in language education. Then, the discussion on the target needs which consist of needs analysis, lacks analysis and wants of students and lecturers in the Critical Literacy course.

In the needs analysis that has been carried out based on the description in the course outline for the Critical Literacy course, student surveys and lecturer interviews, it can be concluded that the course is expected to explore the nature of literacy, critical literacy, and its practice in language learning and teaching both from the perspective of social, multi-disciplinary practice, literacy, or various other contexts. In addition, this course is also expected to provide an understanding of how to get meaning from various spoken and written texts actively, reflectively to understand reality, understand the possibility of power relations, and communicate with other people.

Next, the analysis of student and lecturer difficulties in the Critical Literacy course. Based on the data from the answers of students and lecturers, it can be concluded that most of the students have difficulty in varying students' reading and interpreting abilities. The same thing is also experienced by lecturers who teach Critical Literacy courses.

In the analysis of wants, the lecturer and students want Critical Literacy material which is able to make students think critically with topics related to critical literacy theory, strategy, and practice. In addition, students want material on debates, discussions, criticizing social campaigns, advertisements and short films (visual and audio visual), discussions, and topics on digital literacy.

Then, about the learning needs. In the input, the themes most desired by lecturers and students are technological literacy, media literacy and data literacy. In addition, there are students who want material on how to cultivate critical thinking and how to criticize articles from reputable journals. Some students want material for argumentative writing, critical literacy for young learners and in terms of social media, digital literacy, media literacy and information literacy, critical thinking skills, and critical literacy, 21st century literacy, literacy in language learning, analyzing texts (video, picture, sound).

In the setting dimension, students choose assignments in the form of virtual synchronous class discussions, individual and group assignments. Students also like websites (online) in the form of LMS and digital modules as their learning tools because of the ease of access and variety of learning. The same thing was believed by the lecturer in charge of this course.
From the students’ role dimension, students want to act as explorer, problem solver, researcher, participant and collaborator. Meanwhile, the lecturer wants students to act as explorers, problem solvers, collaborators, participants. Likewise, students want lecturers to act as resource, scaffolder, co-participant, co-learner, moderator and facilitator. Meanwhile, lecturers want roles as resource person, scaffolder, co-participant, co-learner, moderator, facilitator, coach, monitor, and advisor.

Based on the description above, the researcher can conclude that students and lecturers in the Critical Literacy course still encounter various obstacles in learning the Critical Literacy course so that the results obtained can be said to be still less than optimal. For this reason, this course needs a teaching material that is in accordance with the needs of students and lecturers in the Critical Literacy course to prepare students to increase their critical literacy so that they are able to interpret various types of texts. With this critical literacy ability, it is also expected to support students’ understanding of other subject texts and compiling academic papers.

Based on the course outline analysis of the available Critical Literacy courses, the researchers found that the course outline used a very simple format. The development of the available syllabus is also not based on a needs analysis. In addition, the syllabus has not been validated by experts and does not include evaluation indicators or criteria and forms of assessment. The available course outline also does not clearly state the approach or learning method. In the analysis of the available Critical Literacy teaching materials, the researcher found that the objectives stated in the teaching materials still needed to be developed.

From an organizational point of view, these teaching materials are not equipped with a guide for students and lecturers. The teaching materials are also not equipped with digital materials. The literacy content and its types are felt to be inadequate and less specific for students to understand various kinds of critical literacy. The flow of discussion of critical literacy material is still not in-depth and has not been accompanied by concrete examples. Project-based, problem-based and/or case-based learning approaches are less visible in the Critical Literacy course outline.

The material used in exploring texts in various settings (e.g., social media, cultural settings, political settings, and others) is also felt to be inadequate in quality and quantity. The topics contained in the Critical Literacy teaching materials available in the Bachelor of English Language Education are five pieces (overview of literacy and critical literacy, literacy and technology, literacy in language learning, critical literacy in practice, exploring text in various issues) but several topics overlap and should so some topics should be combined. From this point of view, this teaching material does not show the use of a clear method so that the lecturer must prepare the method that will be used in learning the Critical Literacy course.

**Conclusions**

Based on the findings of this study, it can be said that there is a discrepancy between the demands of students and lecturers of critical literacy subjects and the objective facts discovered in the field with regard to teaching materials. This is evident when comparing the results of the needs analysis and the result of the situation analysis. This gap
is seen in (a) the types of information required (b) the types of texts taught, (c) the types of issues explored, and (d) the types of exercises students complete. In other words, the curriculum and instructional materials used prior to the study's conducted were unable to satisfy students' and lecturer's needs for a Critical Literacy course in accordance with their preferences, organizational objectives, and the preferences of graduate users. Second, a new syllabus was required based on the findings of the theoretical studies and in line with the findings of the needs analysis in order to reduce the gap between student needs and objective conditions in the field. Finally, a well-developed syllabus was transformed into a digitally executed curriculum for the LMS application. Multimedia will be used to create this instructional resource because, generally, they complement one another. These requirements ought to be met by the teaching materials that will be created. These needs are derived from the necessities, the lack, and the wants of the students. Based on the results of the analysis of the needs and conditions of Critical Literacy teaching materials available in the Bachelor of English Language Education, researcher will develop a Critical Literacy module design through Google Sites consisting of: Critical Literacy syllabus, Critical Literacy teaching materials website for students and lecturers that can be accessed via Google Sites and integrated with the Learning Management System (LMS) UNJ at www.onlinelearning.unj.ac.id. The syllabus model that will be developed is a mixed model by implementing the principles of project-based learning and case-based learning. The teaching materials that will be developed in the second year of this research are packaged in an online form (e-learning) as a whole (fully online learning) with virtual synchronous learning and asynchronous learning methods. The assessment principle applied is authentic assessment. Meanwhile the learning method used is inquiry learning with the following learning cycle: exploration (exploration/engagement), asking (questioning), gathering information (gathering information/explanation), association (associating/elaborating), and communication (communicating/evaluating).

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References


Schmidt, R. & Thomas, P. L. (2009). 21st century literacy: If we are scripted, are we literate? *Explorations of Educational Purpose (5)*. Springer Science & Business Media B.V.


