Proposed 21\textsuperscript{st} Century Learning Themes in English Classrooms

Tuti Alawiah  
Faculty of Cultural Sciences, Hasanuddin University, Makassar, Indonesia

Abdul Hakim Yassi  
Faculty of Cultural Sciences, Hasanuddin University, Makassar, Indonesia

Nasmilah  
Faculty of Cultural Sciences, Hasanuddin University, Makassar, Indonesia

Abidin Pammu  
Faculty of Cultural Sciences, Hasanuddin University, Makassar, Indonesia

Abstract—In many universities in Indonesia, English is still a mandatory subject. The universities provide the courses under the names \textit{Bahasa Inggris} (English), English for Academic purposes, English I to II, English for Proficiency, English for Health Science, etc. Different universities give 2 credits, 3 credits, or more than 4 credits. The teaching materials used are from various sources, such as from the internet, English books published by famous publishers, or modules written by the lecturers. However, the materials provided are often not suitable for the current situation. Therefore, this research was conducted to investigate and seek better alternatives for English learning. What are the students' target needs with respect to English class materials development? What are the students' learning needs with respect to the development of English class material for Social and Political Science's Students? And what suitable materials are available that are in line with 21st-century learning? This study surveyed 437 new students in the first semester from the Social and Political Science Faculty and eight English lecturers National University of Indonesia. Google form questionnaires were used to collect and analyze data. The three main indicators to be analyzed were: students' present situation, students' target situation, and students' learning situation. The results show that 60.9\% agree that the topics discussed relate to 21st-century learning, 80.3\% of all necessary English skills are learned by the students, and they prefer learning from YouTube/social media and academic journals. Nearly half (46.9 \%) were comfortable with learning through blended learning, and 95.6\% agreed with the use of Google meet, Google classroom, and Zoom meetings. Furthermore, the materials considered appropriate to 21st-century learning include global awareness, finance, economics, business and entrepreneurial literacy, civic literacy, health literacy, and environmental literacy.

\textit{Index Terms}—21st Century learning, 21st century interdisciplinary themes, present situation analysis, target situation analysis, learning situation analysis

I. INTRODUCTION

As educators, in the problem of teaching and learning education in the modern era, teachers and lecturers must pay close attention to their students in order to achieve a good teaching and learning process. It means that lecturers or teachers must improve their professionalism to develop student understanding. As a result, student comprehension is being prioritized in order to improve the quality of teaching English as a second language. They hope their students will be satisfied with the subject, English for example. The success of the teaching and learning process relies on the success of both lecturers and students. The learning process is important things to do. However, it must be realized that teaching strategies, teaching materials, and learning methods will determine the outcome.

On the one hand, students go to universities to gain skills and knowledge through their studies while on the other hand the lecturers should facilitate their students to gain appropriate knowledge and skills as well as ethical and social norms and values so that they will be able to compete in the real world after they have completed their studies. That is why education should be oriented towards meaningful learning so that students will be equipped with meaningful knowledge and a variety of life skills to face competition in the 21st century and to face the great challenges of the future. In this context, schools and universities play an important role in molding character through education, as well as transferring and advancing science and technology relevant to people’s lives and livelihoods. As technology advances, the universities have to provide a greater opportunity for anyone to access knowledge and skill related information in order to develop literacy, so that the learning process becomes integrative, holistic, and contextual in ways that are compatible with life's demands (Menggo et al., 2019, p. 21).
This study is focused on the situational context of students at the National University of Indonesia (UNAS), specifically Political and Social Science students. In order to graduate, every student must obtain a passing grade in English during several semesters. This poses a challenge for teachers to create syllabi and teaching materials which are in accordance with student needs. At present there is no standard for the textbooks used, the teaching materials utilized, what student projects should be done or what specific skills need to be learned. This situation means that the lecturers must each create their own syllabi and teaching material. In this case, the researchers were interested in designing teaching materials appropriate to a 21st-century learning framework.

According to Trilling and Fadel (2009, p. 18), there is a global discourse about how the world has changed, what this means for education, what everyone needs to learn to be successful, how 21st century learning differs from 20th century learning, and what such learning will or should look like. These questions encouraged the authors to seek answers. In addition, Trilling and Fadel (2009, p. 49), while critical thinking and problem-solving abilities were already required in millennia before, there are now new talents to learn, such as digital media literacy, that were not even envisioned fifty years ago. This reality should be a primary concern for teachers and course creators in order to construct English syllabi and content that are relevant to the current situation and the specific abilities in demand in the 21st-century.

According to Andrade (2016, p. 146), the production of teaching materials in higher education must be matched with the accomplishment of learning outcomes suited for the global world of the 21st-century. Critical thinking, problem solving, written and oral communication, cooperation, information literacy, and other global competences are examples of these (Weda et al., 2021a, p. 3). In a similar vein, Fandiño (2013, p. 202) considers that teachers working in English as a foreign language (EFL) classrooms should provide opportunities for practice and facilitate activity-based learning processes that focus on cross-cutting skills such as creativity, critical thinking, collaboration, media literacy, initiative and self-direction, and social and cross-cultural skills. According to Weda et al. (2021b, p. 729), they stated we cannot imagine our students graduating from their studies without having a worthwhile skill-set; however, According to Trilling and Fadel (2009, p. 7), some students who graduate from high school still lack of certain skills, particularly in oral and written communication, critical thinking and problem solving, professionalism and work ethics, teamwork and collaboration, technology application, leadership, and project management. Moreover, according to Partnership for 21st Century Learning-P21 (2015, p. 9), the very skills that many graduates still lack are among the key 21st-century skills. In addition to specific skills, the themes that should be addressed in learning aligned with 21st-century trends include global awareness, finance and economics, business and entrepreneurial literacy, civic literacy, health literacy, and environmental literacy.

II. RESEARCH OBJECTIVES

The research objectives were designed to analyse and typify the students’ target needs and learning needs most relevant to the development of English class materials. These research objectives were formulated based on two research problems, as follows: 1) What are the student target needs with respect to English class material development? and 2) What are the student learning needs with respect to English class material development?

III. REVIEW OF LITERATURE

In recent years, people around the world have been faced with 4.0 industry issues, with the result that companies need to be more selective in recruiting their employees. The people who will have the best chances of being hired will be those who are able to use and have skills in information communication technology (ICT) as well as having 4 C-skills (critical thinking, critical problem solving, communication, and collaboration). Students need to acquire not only strong skills in their core subject areas such as language, arts, mathematics and science, but also cross-cutting competencies like collaboration, creativity and problem-solving, as well as developing character qualities like persistence, curiosity and initiative.

In line with the fourth industrial revolution, which is characterized by global access and disruptive technology, developing means for learners to gain 21st-century skills is critical for enabling graduates to survive and function successfully in this fast growing, global, and complicated environment. The 4C skills are an expression of UNESCO’s four learning pillars, which were revealed in learning to know, learning to do, learning to be, and learning to live together. In a nutshell, students are to be prepared to become graduates who are well-applied, well-organized, and well-prepared. As in the real world, the future employer will not necessarily be looking for the person with the highest literacy and numeracy but rather they will be seeking people with creativity, critical thinking, good communication skills, and the ability to collaborate in an adaptive situation. As a result, teachers and practitioners must adapt to this situation by revising and reconsidering their instructional practices. These include, inter alia, the development of learning materials suitable for the current situation for use in the classroom.

The P21 Partnership for 21st Century Learning was established in 2002 as an outcome of a successful US effort to bring the power of technology to all aspects of teaching and learning. The Framework for 21st Century Learning was created by leaders from industry, education, the community, and government. According to the P21 Partnership for 21st Century learning (2009, p. 4), 21st-century education is a learning process that can produce individuals with knowledge, skills, and abilities in the fields of technology, media, and information, as well as learning and innovation skills and life
and career skills. This framework also explains the skills, information, and expertise that students must acquire in order to be successful in life and at business.

According to the P21 concept, the Indonesian Ministry of Education and Culture interprets the 21st-century learning paradigm as a learning process that emphasizes students' ability to seek and find knowledge and information from various sources, formulate problems, think analytically, and collaborate in problem solving. According to Trilling and Fadel (2009, p. 30), a 21st-century education system combines information with a variety of abilities that can contribute to personal skills, produce civilized citizens, and preserve a high respect for traditional values. P21 has become an increasingly important force in equipping young people to prosper as persons, citizens, and workers.

The following are some of the skills that students must master in 21st-century education, according to the American Association of Colleges for Teacher Education (AACTE) and the Partnership for 21st Century Skills: Creativity and innovation, critical thinking and problem solving, and communication and collaboration are all examples of learning and innovation skills. Information literacy, media literacy, and information/communications/technology literacy are all examples of information, media, and technology skills. Finally, life and career skills include adaptability and flexibility, initiative and self-direction, social and cross-cultural abilities, productivity and accountability, and leadership and responsibility (AACTE, 2010, p. 33).

Furthermore, The American Association of Colleges for Teacher Education (AACTE, 2010, p. 34) also underlines the basic principles for educators in realizing a vision of education that is integrated within the 21st-century knowledge-skills rainbow scheme, which describes the knowledge and skills of the learners. The framework of knowledge skills can be seen in Figure 1.

![21st Century Knowledge-Skills Rainbow](Source: P21 Partnership for 21st Century Learning)

**Figure 1: The 21st Century Knowledge-Skills Rainbow (AACTE, 2010)**

The College Council for the National Coalition for Core Art Standards (2011, p. 20) was mapped out thirteen standard skills that students must master in 21st century education (21st Century Skills Map) as follows: ‘Critical thinking and problem solving, communication, collaboration skills, creativity, innovation, information literacy, media literacy, information communication & technology literacy, flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership skills and responsibilities’. Trilling and Fadel (2009, p. 73) also present three main themes or groups of skills as the basis for 21st century education: (1) career and life skills, (2) digital literacy skills, and (3) learning and innovation skills.

**IV. 21ST CENTURY LANGUAGE LEARNING ORIENTATION**

As previously mentioned, the 4.0 industrial revolution has had an impact on all aspects of life including education. This era is also called the digitalization era, where there is often no longer a clear dividing line between real and virtual life. This situation forces everyone to follow the stream of change unless they want to be left behind.

The concept of 21st century education highlights how learners can be enabled to incorporate a variety of content including the knowledge, specific skills, expertise, and literacy needed to succeed in work and life (Ledward & Hirata, 2011, p. 13). In addition, the skills acquired must include more than just technological literacy; they need to include skills in critical thinking, problem solving, communication, and teamwork (Rahman & Weda, 2018, p. 166). Creativity,
critical thinking, problem solving, communication, and collaboration are important learning and motivational skills (Joyes et al., 2019, p. 56).

Partnership for 21st Century Learning-P21 (2005, p. 13) research reports and studies cover standards and assessments, curriculum content and instruction, professional development, and learning environments. Another study (Tan et al., 2017, p. 427; Trilling & Fadel, 2009, p. 175) identified eleven skills required for 21st-century success. Communication and collaboration, critical thinking and problem solving, creativity and innovation, information literacy, media literacy, ICT literacy, flexibility and adaptability, initiative and self-direction, social and cross-cultural aspects, productivity and accountability, and leadership and responsibility are some of the skills covered.

Furthermore, the P21 movement has identified key subjects and themes for the 21st-century, such as reading, languages and literature, world languages, arts, mathematics, economics, science, geography, history, government, and citizenship. In addition, P21 schools must adopt special interest themes that can be applied in everyday life, such as Global Awareness, Finance, Economics, Business and Entrepreneurial Literacy, Civic Literacy, Health Literacy, and Environmental Literacy. https://www.battelleforkids.org/networks/p21

V. TARGET NEEDS AND LEARNING NEEDS

Dudley-Evans and St John (1998, pp. 123-124) summarized some basic concepts related to English language education needs. Objective and perceived needs are external factors that do not come from the learners; these needs are influenced by the employers, the teachers, and the alumni. On the other hand, subjective and perceived needs are factors internal to the learners which are related to cognitive and affective aspects; to put it simply, the learners know what they know and what they feel about their own needs.

In developing teaching materials, course developers consider learner needs as a necessary starting point. According to Hutchinson and Waters (1987, p. 54), there is a distinction between target needs (what the learner must do in the target situation) and learning needs (i.e. what students need to do to learn). They go on to say that target needs to include necessities, deficiencies, and desires. Necessities can be interpreted as the learner's desire to function effectively in the target situation. The term "lacks" refers to students' difficulties in dealing with their target situation. Wants are associated with the learners' post-course expectations. Meanwhile, learning requirements include four components: input, procedure, setting, and the learner's role (Nunan, 2005, p. 26). Furthermore, Hutchinson and Waters (1987, p. 54) stated that establishing a course design solely on the target objectives is always insufficient, just as thinking that a journey can be planned solely in terms of the starting point and the destination is insufficient. Learning requirements are also concerned with the path from the starting point (lacks) to the destination (necessities). As a result, learning should be enjoyable, fulfilling, manageable, and generative. Course designers must assess learners' learning needs based on their motivation, the conditions of the learning situation, and their prior knowledge and skills.

The present study was conducted to examine and typify student target needs and learning needs with respect to English class material development, specifically for Political and Social Sciences Students, in order to produce suitable materials in line with 21st-century learning. In this context, the researchers considered that the present situation of learners also needed to be analyzed.

VI. METHODS

In order to seek answers to the research questions, questionnaires were distributed to students taking English classes and to English lecturers. Questionnaire delivery and response via Google forms was adopted due to the limitations imposed by the Covid-19 pandemic regulations in vigor. The questionnaire was sent to the respondents in November 2020. In order to evaluate whether the questionnaire could fulfill the expectations of the researchers, a validation process was carried out before the survey was implemented. During this validation stage, questionnaires were shared with a few students and English lecturers. To provide additional information and input for developing the materials, interviews with English lecturers were also an important and integral part of this study.

A. Population and Sample

The research population was 437 new students in Political and Social Sciences. The students were from several departments: International Relationships, Political Science, Public Administration, Sociological Science, and Communication Science (Table 1).

<table>
<thead>
<tr>
<th>No</th>
<th>Department</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International Relationships</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Political Science</td>
<td>49</td>
</tr>
<tr>
<td>3</td>
<td>Public Administration</td>
<td>74</td>
</tr>
<tr>
<td>4</td>
<td>Sociological Science</td>
<td>68</td>
</tr>
<tr>
<td>5</td>
<td>Communication Science</td>
<td>201</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>437</td>
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</tbody>
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This research also involved 13 lecturers who teach English in the Political and Social Sciences Faculty (Table 2). These lecturers participated in a Focus Group Discussion (FGD) to formulate “Learning Themes in the English Classroom to achieve the 21st-Century Knowledge-Skills Rainbow”. The department affiliations of the lecturers are shown in Table 2.

<table>
<thead>
<tr>
<th>No</th>
<th>Department Base</th>
<th>Number of Teaching Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International Relationships</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Political Science</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Sociological Science</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Communication Science</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>

The main expertise of the lecturers involved in the FGD included classroom management, syllabus design, teaching material development, and English for specific purposes (Figure 2).

![Lecturers' Expertise](image)

**Figure 2: The Main Expertise of English Language Teaching Staff Involved in the FGD**

### B. Instruments

This research used a questionnaire to collect data. The items were checked by expert judgment to evaluate their relevance or irrelevance with respect to content validity before the questionnaire was distributed. The data were divided into three main question groups: Student’s Present situation, Student’s Target Situation in Learning English, and Student’s Learning Situation. There were twenty-two questions and for each question the students were asked to choose one of the options given. The questions had different numbers of options. Four questions had four options, three questions had five options, two questions had three options, and four questions had two options. Six open-ended questions were also given in order to obtain more in-depth information from the students. The questionnaire was also given to seven lecturers, and two of the lecturers were also interviewed with respect to their knowledge of 21st-century learning.

### C. Data Analysis Procedures

Data were collected through two procedures: (1) the questionnaire was distributed to the respondents in stages, due to the procedures used to share the Google form link (URL). The respondents spent around five to seven minutes answering the questions; (2) in-depth interviews were conducted for about thirty minutes. These two procedures took place on different days. In addition, the in-depth interviews were carried out based upon an agreement between the researchers and the English lecturers.

### D. Data Analysis

The data obtained during this study were analyzed using Google form analytics with qualitative interpretation. Data from the questionnaire downloaded by the researchers already included basic statistics, in particular the percentages for each response to each of the questions. Data from the in-depth interviews were analyzed qualitatively, as they relied on respondent responses.

### VII. Findings and Discussion

The following discussion includes the results of interviews with a representative sample of two out of the seven English lecturers as well as the results from the questionnaires completed by the new students at the first lecture session.
and by the seven English lecturers. The results of the questionnaires answered by Political and Social Sciences Faculty students were the pivot of the analysis on subjective and perceived needs; in other words, student’s target needs and students’ learning needs. The findings of this study focus on Target Situation, Learning Situation Analysis, and Teaching Context Analysis, as adopted from Philp et al (2010, p. 277). The student questionnaires also covered some points related to Students’ Present Situation Analysis.

A. Students’ Present Situation Analysis

The present situation analysis discussed the current situation of new students in the Faculty of Political and Social Science at the first meeting of the class. The information covers the students’ level in English skills, their ability to understand journals, news on TV, or other social media, and whether they are able to write an English essay or compile a report in English. Based on the results, 65.2% considered that their current English language skill level was moderate. Furthermore, 71.9% answered that they were mostly able to understand journals, news on TV, or other social media, albeit not perfectly; and 70.3% said that they were able to write an essay or simple stories, and compile English reports.

These questions are considered necessary because course developers need to know their students’ initial level of language knowledge. According to Dudley-Evans and St. John (1998, p. 125), “analysis of the present situation estimates strengths and weaknesses in language, skills, and learning experiences.”

B. Students’ Target Situation Analysis

Second Language Acquisition (SLA) concerns learners’ situation; this is subjective and relates to how they are feeling their needs and what kind of learning situation they want, based on learner preference with respect to the learning process and their learning styles (Ortega, 2018, p. 72). Furthermore, Hutchinson and Waters (1993, pp. 59-63) also use WH questions (what, when, where, who, whom, which, whose, why and how) while analyzing the target situation and the learning needs. In brief, both analyses of target situation need and analyses of learning needs are vitally important in order to elucidate the reasons of learners and how they learn the language (Rahman et al., 2019, p. 164).

The results of the SLA section show that 73.2% of the students prefer learning through YouTube, Facebook, Instagram, and Twitter as the main media for increasing their English skills. Regarding the tasks, 53.1% consider that both individual and group assignments could be given. As the classes take place virtually, the students are asked to participate in the class using Zoom or Google Meet, and 95.6% of students say they “agree” with this approach.

C. Findings from English Lecturers

In the questionnaire, all respondents (100%) said they “agree” that there is a need for changes in teaching materials based on 21st-century learning approaches. This confirms that there is a real need for teaching materials to be improved. They all also agree the themes for teaching materials should be related to Health literacy, Civic literacy, Environment literacy, Media literacy, Finance and Entrepreneurship literacy. These responses demonstrate that all respondents consider those topics are particularly appropriate for use in teaching the students. Regarding media as a supporting tool in the teaching-learning process, 71.4% highly recommended the inclusion of social media such as videos available on YouTube when designing teaching materials. All but one of the lecturers (85.7%) were willing to take part in designing a module or English book for this class. These responses show that teaching materials adjusted to students’ needs and adopting 21st-century learning approach will be more useful and that it should be possible to provide them.

VIII. CONCLUSION AND SUGGESTION

This study examined the results of students’ present situation analysis, students’ target situation analysis, and learning situation analysis in order to discover what the students actually need to learn in English lessons and what suitable teaching materials are available and could be used. Based on the discussion, the researchers found two important points; firstly, the students’ present situation is that their English language knowledge is moderate, and they clearly said that they expect to be able to speak English fluently and correctly. Most of them are able to read English journals and news. In addition, they can write essays, simple stories, and English reports. Secondly, regarding the results of the students’ target situation analysis and students’ learning analysis, they need to improve all their English language skills and they agree on the topics that should be taught under 21st-century learning approaches. Meanwhile, with respect to learning needs, they like studying by using social media such as YouTube, Facebook, or Instagram to assist them in understanding English. Giving tasks or assignments to the students also needs to be discussed; this is because if there is a pre-discussion between teachers and students, each party will abide by the agreement made. The students agree on both individual and group tasks; in addition, as the AACTE classes are not fully implemented on-site, they willingly accept to study via an online application such as Zoom meeting or Google Meet. Furthermore, the findings reveal that the majority of lecturers are willing to design an English book or module for students at the Faculty of Political and Social Science and to include topics or themes that follow the themes and adopt the approaches of 21st-century learning. The results also show that the teachers are willing to accept the use of social media as a tool in the teaching-learning process. Based on these results, the researcher suggests follow-up steps such as designing a suitable syllabus supported by an English Course Book for students at the Faculty of Political and Social Science at the National University in Jakarta, Indonesia.
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Tuti Alawiah is a postgraduate student at Hasanuddin University majoring in linguistics. She has worked as a lecturer at the National University, Indonesia.

Abdul Hakim Yassi is a senior lecturer at Hasanuddin University. He teaches in the Faculty of Cultural Sciences.

Nasmilah is a senior lecturer at Hasanuddin University. She teaches in the Faculty of Cultural Sciences.

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