CHAPTER I

INTRODUCTION

1.1 Research Background

Critical and creative literacies (CCL) are two basic needs for every single learner in higher education. The importance of CCL in the teaching of English as a foreign language (EFL) today is not only to complete the academic tasks but also to prepare the learners to face global interaction and competitiveness because of digital social media disruption in their entire lives. Nurturing them with CCL skills is also an important treatment to help them complete the required academic skills at university, to be able to adapt to a constantly and rapidly changing world due to the technological, social, political, and global labor market development (Tanggaard, 2019) because their failure or success is significantly influenced by their literacy levels (Zolfaghari & Ahmadi, 2016; Kalinowski et al., 2020). These skills can be integrated across the curriculum of the schools (Thomson et al., 2019) with the development of a technological pedagogical and content knowledge (TPACK) framework.

Although critical and creative literacies are considered as two broader interchangeable terms (Luke in Norton, 2007), they are two different concepts with different mental processes. As this conception of literacy is meaningful and essential, some educators conceive of critical literacy in broader

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sociocultural and political terms (Bishop, 2014). It can be understood that critical literacy refers to the peak of an individual's knowledge and skills in reading or writing sociocultural, political, or injustice essays critically and creatively. Furthermore, some scholars have constructed several definitions of both critical and creative literacy modes (Dozier et al., 2006) in which critical literacy is defined as the comprehension process or meaning negation of how language and literacy skills are used to accomplish social ends. They distinguish between language as a communication tool and skills of producing meaning through critical reading or creative writing to accomplish social communication needs. It can be inferred that creative literacy is an individual's ability to execute or produce a new thing or innovative ideas in the social, cultural, political, or injustice issues (Kiosses, 2019;). The new ideas may come from the old ones combined in a new way (Lau, 2011) for the creativity. The creativity will not happen without a set of critical thinking process.

In the teaching of English as a foreign language (EFL), being critically literate, learners need high exposure to linguistic and nonlinguistic factors (Arfah & Zamzam, 2017). Huang (2011) revealed that linguistic factors alone do not control the success of an individual's literacy development. He or she needs other factors such as the knowledge of the contents such as social issues, cultural issues, political, economic, gender bias, or social injustice issues delivered through a discourse. A writer usually constructs issues according to

his or her ideological and ontological frame with a specific standpoint. Parts of information are sometimes unstated, but they flow through the diction, different syntactic patterns, or different writing genres as the communication style because, as a written text mode, writing involves sentence arrangement, and text structure to communicate a piece of information in the forms of narratives, descriptive, persuasion, or to transform into new texts as in analytical exposition or argumentative writing (Padmadewi & Artini, 2019). To comprehend the contents constructed directly or indirectly within the reading text, a reader needs critical thinking skills or metacognition skills such as making a judgment, problem-solving, or decision-making through questioning, predicting, analyzing, synthesizing, examining opinions, identifying values and issues, and distinguishing between alternatives, or selecting appropriate solution of the controversial issues stated in the text (Novianti et al., 2020; Bobkina & Stefanova, 2016; Yang et al., 2013; Ennis, 2011; & Anderson et al., 2001). To think of both linguistic and nonlinguistic factors delivered through well-structured written essays, creativity is also needed to come up with useful ideas to construct a newly written text with the same writing components and structure as the outputs of critical review of the reading texts. That is the point of creative literacy in the Program for International Student Assessment (PISA, 2021) which defines creative thinking as an individual's ability to be productive in generating, evaluating, and

improving ideas, opinions, or taught, that can result in original and practical solutions, advances in knowledge, and effective expressions of imagination. These critical and creative thinking skills might be melted in the learning experiences with high challenging instructional materials in the English writing classes.

The importance of CCL in EFL classes has been explored by experts. Abrami et al., (2008) through a meta-analysis study found that the types of critical thinking and pedagogical grounding intervention affect the fluctuation in the critical thinking skills level and their varieties. They suggested that the skills cannot be explicitly stated in the curriculum but should be explicitly constructed as a learning outcome. Furthermore, Graham et al., (2018); Marope (2014); & Menggo et al. (2019) reveal that critical, creative thinking skills and other 21st-century skills are vital and necessary skills that ought to be provided to students, but they are not sufficient, even in integration. These literacy skills are not only added but should be melted in the instructional materials, learning and assessments tasks with the knowledge and comprehension of the socio-cultural diversities of the local and global community to meet the criteria of critical literacy. Furthermore, Elen et al. (2019) with their European critical thinking education teams formulated a framework of the critical thinking education system in higher education across the subject matters through a joint company-university project program. They considered that the skills are

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important learning outcomes of higher education institutions. Therefore, both critical and creative thinking skills ought to be melted in the instructional materials and learning tasks to promote the critical and creative literacies in the EFL classroom.

Several studies have been carried out to explore the challenges of integrating critical and or creative thinking skills across the subject matters in EFL classrooms in some countries. Saleem & Masadeh (2021) and Al-Kindi & AL-Mekhlafi (2017) through qualitative study found that the significant challenges in integrating critical thinking skills are the instructional materials, classroom size, training, and extra-curricular activities which need urgent solutions. These critical and creative thinking skills should be melted in the instructional materials and the learning experiences by using technological devices or application. Nabhan & Sa'diyah (2021) through qualitative study explore that the use of Google Docs. can develop the learners' enthusiasm, digital competence, and writing skills but they experienced several difficulties in terms of internet signals, gadgets availability, and their ability to operate the Google Docs. Santosa (2017) also found that the students' English achievement is increase because of flipping the learning experiences with the technological devices use in the teaching and learning process. Furthermore, Sujana et al., (2021) through research and development found that the students' access frequency to online learning is high and they concluded that blended learning

can support the instruction that is carried out through virtual classes and the use of Google Classroom to individualize learning, improve instructional activity and creativity. These research results showed that the TPACK framework involving the eight components such as pedagogical knowledge (PK), technological knowledge (TK), content knowledge (CK), technological pedagogical knowledge (TPK), technological content knowledge (TCK), pedagogical content knowledge (PCK), technological pedagogical and content knowledge (TPACK), and context can be utilized design a model to promote the critical and creative literate learners.

Based on the preliminary study carried out through observation, the analysis of the students' writing worksheets, and self-reflection on the teaching process from August to November 2022, several problems were found in the writing classes at the EFL classroom at the University of Mataram. Several learners easily copy-paste their writing tasks from online resources without any paraphrasing, elaborating the main idea in detail because of the lack of vocabulary. Some are struggling learners in providing evidence to support the claims to write a strong argumentation. The problems faced by the learners deal with the linguistic factor, and writing issues organization. Others did the writing tasks by utilizing several platforms such as a digital dictionary, spelling, and grammar checker in Microsoft Word and could write a good essay. However, writing is not only arranging words into phrases, combining

phrases to create clauses or sentences, and connecting sentences to write a paragraph but also understanding the knowledge of managing and organizing the ideas in semantically-well meaning. On the other hand, the writing curriculum design is more focused on linguistic mastery rather than the knowledge development of the issues or ideas that are delivered through written communication, and the critical and creative skills improvement through a set of technological devices, challenging instructional materials, and learning experiences.

The integration of CCL in the teaching practices of EFL is also challenging for the teachers. Huang et al. (2020) revealed that a few studies focused on the development of the learners' thinking skills as well as their English proficiency improvement. Alkhatib (2019) found that professional development through training, seminars, and workshops of developing learning activities, which support critical and creative literacy cultivation is rarely held by the university, other professional organizations, or the stakeholders. Research carried out by Mühlen et al., (2019) confirmed that the training of argumentative essays did not generally increase the students' performance in the writing of argument types although it had helpful learning activity in recognizing more complex arguments with a less typical organization in the writing process. They suggested that the curriculum and the instructional activity ought to be matched to the learners' abilities. This research proves that

if the EFL learners' critical or creative literacy is low, the main factors are the lack of challenging instructional or assessment tasks and professional training for both literacies.

To solve the problems above, several studies have been conducted by several researchers. Yang et al., (2013) conducted research dealing with the integration of critical thinking in the English receptive and productive language skills in non-English majors through experimental design. With eighty-three participants recruited for the experimental and control groups, the research results showed that the experimental group had higher improvement in their critical thinking skills as well as their English performance than the control group. And, the student's performance in the integration of critical thinking in the listening and speaking skills, which is designed by using Moodle as a learning management system is also higher in the experimental group than in the control. Changwong et al., (2018) carried out experimental research regarding the integration of critical thinking skills in writing class. The results showed that the critical thinking skills of the students in the experimental group developed as well as their writing performance in the control group. And, another research that had been conducted by Choo & Singh (2011) was about the effectiveness of using media to develop the level of critical literacy in English argumentative writing. The students in the experimental group had a higher level of critical literacy compared to the control group. Furthermore,

Alidmat & Ayassrah (2017), Sabu & Vernandes (2019), Hanim Rahmat et al., (2020), and Murtadho (2021) revealed that writing tasks can improve the students' thinking skills, are interdependent in the learning process, and the critically-designed tasks contribute to interesting implication for the writing process among undergraduate students. However, these researches were more focused on the exploration of writing and critical thinking skills of the students without a systematic intervention with technological devices in the teaching of argumentative writing for promoting both critical and creative literacies (CCL) of the EFL learners.

The integration of technology and the multiple digital learning resources and social media devices can also be utilized as instructional media in the teaching of CCL (Anderson et al., 2018) across the subject matter. Providing technology-based materials can actively involve the learners through synchronous or asynchronous learning modes, interact, and communicate among the learners or with their other classmates outside the classroom. However, Sert & Boynuegri (2017) found that the learners' English proficiency is not significantly connected to their technology use level and the teachers' technological use level with their students. Both contradictive research results prove that the success or failure of technological and social media utilization in the EFL classroom depends on the teacher's knowledge to select and utilize more appropriate learning platforms as the learning recourse or the

instructional media. Öznacar & Dericioğlu (2017) state that the failure of the TPACK framework to enhance the student's academic performance because the administrators failed to integrate the instructional materials into the learning experiences and practices in the classroom. Geng et al. (2019) revealed that multiple technological learning devices can actively engage students in a blended and non-blended learning environment. Santos & Castro (2021) and Malik et al. (2019) confirmed that teachers' technological and pedagogical knowledge (TPK) and technological and content knowledge have strong effects on their ability to implement the TPACK framework in EFL classes. These research results showed that teachers' knowledge and skills are the most essential factors in designing an appropriate TPACK model for increasing the EFL learners' writing competence for promoting their CCL skills development. Therefore, the integrations should be done through the utilization of technological devices in the teaching of argumentative writing comprehensively for promoting the CCL of the learners in English Education at the University of Mataram.

1.2 Problems Identification

The importance of CCL skills in argumentative writing classes is due to the required skills that the students need to communicate their ideas, opinions, or thoughts through a well-writing construction with semantically well-meaning. However, the preliminary study and self-teaching results from

August to December 2021 in the teaching of argumentative writing courses showed that problems can be classified into four categories, namely the demand for 21st-century skills for global competitiveness, the problem which relates to the linguistic factors, the issues or information knowledge mastery, idea organization according to the genre, and the use of technological devices for learning writing.

First, the research stated in the background of the study shows that critical and creative literacies are the fundamental skills for higher education learners to face global competitiveness. They also need literacy skills to complete their academic tasks. However, the integration of critical and creative thinking skills in the instructional materials, instructional media, or learning experiences is not systematically developed in the current writing curriculum in the undergraduate program of English education at the University of Mataram.

Second, linguistic factor refers to the linguistic form such as vocabulary mastery, word combination to make phrases, phrase combination to create clauses or sentences, and sentence connection to make paragraphs and to create an essay. These linguistic aspects challenge the learners in writing argumentative essays. Some are struggling learners in terms of constructing a well-writing organization. Others were able to construct simple essays with

several mistakes. The challenges in this factor can be understood when analyzing their writing worksheet.

The third problem is the ability of the EFL learners to organize ideas, opinions, thoughts, or issues based on the argumentative writing structures. Most of the students' work about a controversial issue of local culture was not explored in logical argumentation. The argumentation stated in their writing was a lack of evidence. The supporting points did not provide strong evidence in terms of statistical data, quotations, illustrations, or examples to persuade the readers; they only made several claims without detailed elaboration. Also, their ability to construct rebuttals or counter-claims needs high improvement. Some of their mind-maps analysis results about the guided topic developed with pro-cons chart, for example, did not show logical cohesion of their writing. These observations and the writing portfolio analysis results showed that the learners' argumentative writing ability is also influenced by the level of their knowledge of the topics and their thinking skills in organizing the ideas.

The last, most technological devices are not developed for educational purposes but they can be utilized for learning argumentative writing in EFL classrooms. Several problems relating to this part can generally be classified into two, technical and nontechnical problems. Technical problems faced by the learners in argumentative writing classes are the instability of the internet signal and unfamiliarity with the technological device menu of the learning

management system. Nontechnical problems refer to the high number of copy-paste of their writing tasks from online resources. These are the challenges in utilizing the learning management system of the University of Mataram, which is known as spada.unram.ac.id, or other technological media for providing high learning opportunities to students inside and outside the classroom or in a virtual class. However, to effectively use the technological media in the argumentative writing class needs content knowledge, pedagogical knowledge, technological knowledge, their overlaps, and the context.

1.3 Scope and Limitation of the Study

Due to the wider scope or domains of CCL, it is important to determine the limitations of this research study. This research focused on solving the problems that the EFL learners faced in writing argumentative writing classes to increase their critical and creative literacies as well as their writing performance development.

Because argumentative writing requires linguistic forms mastery and the writing issues, the instruction should serve both factors, micro-and macro skills of argumentative writing. Micro argumentative writing skills refer to linguistic devices such as phrase, sentence, and paragraph organization while macro skills involve the argumentative writing genre such as writing hook, background information, claim or thesis statement in the introductory

paragraph, and the comprehension of the issues that are communicated through the written text.

To enhance the CCL of the learners, the instructional tasks and contents of argumentative writing were designed by adopting high-order thinking skills (HOTs) with sociocultural issues as the writing topics. These critical thinking skills and the issues were melted into the pedagogical knowledge and content knowledge of the TPACK framework.

1.4 Research Questions

Based on the problem identification and limitation of the study the research problems are as follows.

1) What type of TPACK-Flipped argumentative writing instruction model is needed for promoting the EFL learners' critical and creative literacy (CCL) in higher education?

2) How is the TPACK-Flipped argumentative writing instruction model developed for promoting EFL learners' critical and creative literacy (CCL) in higher education?

3) What is the efficacy of the TPACK-Flipped argumentative writing instruction model for promoting the EFL learners' critical and creative literacy (CCL) in higher education?

4) What is the efficacy of the TPACK-Flipped argumentative writing instruction model for promoting EFL learners' argumentative writing skills in higher education?

1.5 Research Objectives

The objectives of this research study are as follows:

1) to explore the need for a TPACK-Flipped argumentative writing instruction model for promoting the EFL learners' critical and creative literacies (CCL) in higher education.

2) to develop a TPACK-Flipped argumentative writing instruction model for promoting the EFL learners' critical and creative literacies (CCL) in higher education.

3) to evaluate the efficacy of the TPACK-Flipped argumentative writing instruction model for promoting the EFL learners' critical and creative literacies (CCL) in higher education.

4) to evaluate the efficacy of the TPACK-Flipped argumentative writing instruction model for promoting the EFL learners' argumentative writing skills in higher education.

1.6 Significances of the Study

Theoretically, this research is hoped to contribute to the innovation strategy of the teacher professional development regarding the promotion of

the CCL through the TPACK-based argumentative writing instruction model for EFL learners in higher education. The research results are also hoped to enhance the English teaching methodology in non-native countries in which several high-order thinking skills and technological literacy can be integrated into the instructional materials or multiple learning tasks.

Practically, the results of this research are also hoped to effectively give a practical strategy of integrating multiple literacies in the teaching practice of English as a foreign language in higher education. The teacher needs a comprehensive model of integrating multiple literacies such as technological and digital literacy, critical and creative literacies in designing the learning experiences, and materials organization. In this case, the success or unsuccessful of the EFL teaching practice is not determined by a single variable, but by multiple integrative variables and aspects. So, the results of this study can contribute to the teacher's professional development practice in modifying and utilizing the technological, pedagogical, and content knowledge (TPACK) framework to engage the students inside and outside the classroom through synchronous and/or asynchronous learning modes. For the students, it might provide a high learning opportunity to learn argumentative writing with multiple platforms and e-learning devices for promoting their CCL skills as well as their writing performance.

1.7 Novelty of the Research

Based on the purposes of this present study, some original aspects were developed and synthesized to address the research questions. First is the original TPACK framework, the original framework of the flipped classroom model, critical and creative literacy skills, and argumentative writing as the thinking objects. They were integrated as a new development model named Zampatira: A TPACK-Flipped Argumentative Writing Instruction model.

The basic principle of TPACK is the integration of technology into course content and content delivery systems. This instructional development framework consists of basic components involving pedagogical knowledge (PK), content knowledge (CK), and technological knowledge (TK), and three overlapping components, namely technological pedagogical knowledge (TPK), pedagogical content knowledge (PCK), technological content knowledge (TCK), and technological and pedagogical knowledge (TPACK), which is encircled with a context (Mishra & Koehler, 2006; Koehler et al., 2017).

As it is an instructional framework, it might be applied across the curriculum. In this present study, the eight components of the original TPACK framework were developed according to the results of a need analysis on the participants' CCL skill gaps, argumentative writing performance, the required resources, the current curriculum targets, and the related theoretical review.

The developed TPACK factors from the original are the substances of the eight elements.

The second factor that distinguishes this present study from the others is the modified original component and structure of the flipped instructional model. As one type of blended learning, the original concept flipped is integrating learning activities outside and inside the classroom (Zeng, 2021). However, in this present study, the flipped instruction is modified to implement three learning paths of the semester credit system (SCS) recommended in the regulation of *the Minister of Research, Technology, and Higher Education Republic of Indonesia* No 44 Year 2015. They are tutorial (face-to-face) learning activities, structured learning tasks or assignments, and/or independent learning activities. These three learning activities are flipped by using the integration of technological applications or platforms driven by a learning management system, http://daring.unram.ac.id.

The third newly developed aspect in this developed model is the synthesis of critical and creative thinking skills to become a set of the seven critical and creative literacy domains. Because creativity will not happen without criticality and the thinking process will not happen without the object of what to think, in this present study, the critical and creative thinking skills are melted into critical and creative literacy. The developed framework of critical and creative literacy in this study is a set of synthesis results of the critical and creative

thinking process proposed by Bloom (Anderson et al., 2001), Luke (2012), Ennis (2011), Shively (2018), and Facione (2000 & 2022). These synthesis results are used for the questionnaire development of the critical and creative literacy (CCL) skills that are melted with the generic structure, components, language features, and issues of the argumentative writing course.

Next, a new modification in this research is the argumentative writing issues and the learning experiences delivery. In this present study, the argumentative writing issues are mostly adopted from local issues around the students in Nusa Tenggara Barat. This modification aimed at contextualizing the materials and learning activities, reducing the copy-pasting from online resources, and triggering the critical and creative literacy (CCL) of the students involved in this research.

The last new development in this research is integrating the implementation of deconstruction and construction instructional process in the learning of argumentative writing course. Lau (2011) states that to write a new thing, people should understand what other people did. Anderson and Irvine (Bishop, 2014) also confirm that critical literacy is learning to read and to write of becoming aware of people's experiences as historically constructed within specific power relations. These theories inspire the importance of deconstruction and construction processes to promote critical and creative literacy (CCL) skills integrated into argumentative writing course. So, the

learning experiences in this developed model are divided into three phases, namely deconstruction process, guided or controlled construction, and independent construction. The deconstruction process is implemented at the beginning part of this course. It is implemented through critical reading of the argumentative essay model. It focuses on the internalization process of the argumentative writing theory and model. The guided or controlled construction is implemented in pairs. The learning activities are focused on writing as a process, while independent construction leads to independent work.