

# DESIGNING ICT COMPETENCES-INTEGRATED WRITING MODELS OF TEACHING FOR ENGLISH LANGUAGE STUDY PROGRAM

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## **Abstract**

Regarding the requirement of incorporating ICT competences into the teaching and learning process, the aim of this research is to design Models of Teaching for Writing Courses that have infused ICT competences into its teaching and learning activities. R&D was used and adapted from Richey and Klein's concept, with four stages of research including Need Analysis, Design Preliminary Product, Evaluation, and Revision. Literature study and observation were required during the design of ICT competences-integrated teaching models. The findings revealed that integrating ICT competences into existing teaching models was as knowledge deepening as the dominant ICT competences level in which students performed the ability to manage information and used open-ended software tools to access information, deliver the material, and collaborate with peers. Meanwhile, Kilbane and Milman's integrative teaching models were modified, and ICT was incorporated into the design of the Teaching Model for the Writing Course, which was reflected as a prototype lesson plan outlined in paragraphs.

**Keywords:** ICT Competences, Teaching and Learning Activity, Writing Course, Lesson Plan

## **1. INTRODUCTION**

It is widely acknowledged that how teachers prefer to teach has an impact on the teaching and learning process. It is influenced by instructors' beliefs about education and teaching, and teachers should recognize whatever method of instruction appears to be most compatible with their current beliefs. The quality of the teaching or pedagogical preparation that teachers receive is another factor that influences how they teach. Students should learn better if teachers have more knowledge and expertise in preparing, delivering, and assessing teaching (Cruickshank

Donald R, Jenkins Bainer Deborah, 2006). Furthermore, academics and educators have determined, according to Behar and Horeinstein that no single technique to teaching is appropriate in all instructional circumstances. To achieve various aims, effective teaching necessitates a variety of ways. Teachers must employ a variety of instructional tactics to guarantee that pupils are never bored and that they are exposed to a variety of strategies (Behar-Horenstein and Seabert, 2012)

In the educational field of the twenty-first century, certain standards

have been developed to serve as a guide for stakeholders. Integration of ICT in language teaching is one of the standards that should be followed. Many countries now consider understanding ICT and mastering basic ICT skills and concepts to be essential components of education (Noor-Ul-Amin, 2013). According to Ozdamli, while digital technologies are used for entertainment and communication, they are also used in education to provide a learning process for both teachers and students (Ozdamli, 2017). It is also in line with Sudewi (2020) stated that the advancement of information technology and communication has an impact on the use of teaching aids such as computers and the internet. The existence of educators as adults whose function it is to provide support and assistance to students in the learning process becomes very meaningful. In short, the emergence of such modern education technology has significantly altered the face of education over the last several decades. Furthermore, the incorporation of ICT competencies into language teaching has an impact on how teachers teach, learn, and assess students. The world is changing as a result of five major trends: digital technologies, information access, globalization, equity, and accountability. As they do so, the ideas, movements, and reforms they inspire have an impact on 21st century education. An understanding of these trends and how they affect education will help teachers better understand what is required to prepare 21st century learners for the future (Kilbane Clare R, 2014)

The importance of ICT employment in teaching and learning activity has been explored by several studies. Rababah (Rababah, 2019) was in charge of the first. Based on the research, the

researcher observed ten English Foreign Language (EFL) teachers to determine how ICT tools were used by the teachers in the classroom to teach English. The study discovered that teachers use a variety of media and technologies in their classroom instruction. All of the teachers were observed incorporating one or more ICT tools into their writing classes. In terms of ICT integration, the word processor is the most commonly used ICT tool by teachers, followed by e-mail, e-content, and other tools. To enable their writing ability, the teachers use a combination of media and technologies. They use technologies such as e-mail, word processors, and e-content in the English language, with the word processor being the most commonly used, followed by e-mail and e-content. Meanwhile, Lubis (Lubis, 2018) discovered that, while such frameworks elicit positive perceptions, the benefits of integration in students' learning processes in Indonesia were still focused on the technical levels, rather than the communicative and functional ones.

Based on the findings of previous researches, the first study reported the use of ICT as a tool for communication in learning and teaching activities. Both the teacher and the students do not demonstrate the ICT competencies that would be discussed in the Literature Review. Meanwhile, the second study discovered that, while the use of ICT tools has successfully improved the teaching-learning process, it has only focused on technical tools to support the teaching and learning process. In terms of ICT integration, both studies found that teachers continue to lack specific and definite ideas about how to incorporate technology into instruction, as well as specific knowledge about technology and how to combine it with

existing pedagogical content knowledge to support student learning. As a result, the goal of this small-scale study is to design ICT-integrated models of writing course teaching for teachers and students. Therefore, the research questions for this study was formulated as follow:

1. To what extent are the ICT competencies incorporated in the existing models of teaching of writing course for English Language Study Program?
2. How are the designs of ICT Competences-Integrated Models of Teaching of Writing Course for English Language Education Study Program?

## 2. LITERATURE REVIEW

### An Overview Models of Teaching

Models of teaching are specific approaches to instruction that share three characteristics: goals, objectives, and objectives (it is design to help students develop critical-thinking abilities and acquire deep understanding of specific forms of content), Phases (It consists of a series of steps, commonly referred to as "phases," that are designed to assist students in achieving specific learning objectives), Foundations (it is supported by theory and research on learning and motivation). It refers to specific approaches to instruction that include a specific set of steps designed to help students develop critical-thinking skills and gain a thorough understanding of specific types of content. Furthermore, Cruickshank (Cruickshank Donald R, Jenkins Bainer Deborah, 2006) has different terms for teaching models. The instructional model is used to create an instructional plan. Instructional planning is defined as the process by which teachers determine (1) what to teach, (2) how to teach it, and (3) how

to assess whether students have learned and are satisfied. A lesson plan specifies exactly what and how something will be learned over a short period of time, usually one or a few class hours. Cruickshank et al suggested the following lesson plan format:

1. Objectives – indicate the lesson's objectives
2. Resources – denote resources and materials to be used
3. Set induction – describe how the lesson will be introduced
4. Methodology – describe how teaching and learning will take place
5. Assessment – make clear how student learning will be determined
6. Closure – provide for lesson ending
7. Reflection – consider the lesson's effectiveness

In terms of lesson plan, Cruickshank, Kilbane, and Milman's modified purposed lesson plan was used in this study. Kilbane and Milman created the Integrative Model as an instructional model for teachers to use in teaching students in the twenty-first century. According to Kilbane and Milman (Kilbane Clare R, 2014), the Integrative model is a purpose-driven instructional model that assists students in developing the ability to learn independently using various thinking skills. Students improve their ability to think, analyze, and draw conclusions on their own as a result of this process. This model is based on formal strategies that teach students how to analyze and interpret information in school and beyond. Students who participate in the Integrative model learn and develop skills that they can use on a regular basis to make sense of their school and daily life experiences. The model promotes students' learning across academic disciplines while also

empowering them to become self-directed learners.

The model is divided into four stages. Each phase is designed to engage students in various cognitive processes that lead to the development of meaningful conclusions about the information explored. Students describe, compare, and search for patterns in the content that represents an organized body of knowledge during the first phase. In the second phase, students examine the content more closely to explain the identified similarities and differences. That is, students must go beyond simply identifying similarities and differences to explain why they exist. Students form hypotheses based on their examination of the content during the third phase. Finally, students make broad generalizations about the content in the fourth phase. They reach conclusions that synthesize their knowledge while also demonstrating how their knowledge can be applied in a broader context.

The model works best for teaching units of instruction that incorporate conceptual knowledge, foster critical thinking, and require students to make connections between information they have learned. This model is one of the best for teaching conceptual knowledge—the model's central interrelationship of facts, concepts, and generalizations. Because the model's goal is to foster students' conceptual understanding of the content being learned based on facts, concepts, and generalizations, it is an ideal model for teaching conceptual knowledge. Students begin by learning facts and then use that knowledge to make larger connections between facts and concepts and, eventually, to make informed inferences about the content studied. Additionally, teachers should use the

Integrative model to promote critical-thinking skills, which require thinking at the higher cognitive process levels of the revised Bloom's taxonomy. Students work at the lower stages of the revised Bloom's taxonomy, which emphasize factual knowledge, in the first two phases of the Integrative model, and then teachers gradually lead students in the application of higher-level cognitive process skills in the last two phases. The Integrative model provides a framework for teachers to guide students through the process of describing, comparing, categorizing, analyzing, examining relationships, and generalizing about organized bodies of knowledge. It also scaffolds student learning through a four-phase process in which students analyze content-based materials presented in text and other formats (Kilbane Clare R, 2014)

Although models provide a framework, structure, and direction for teaching, they are not a replacement for teachers who lack subject matter knowledge, creativity, and interpersonal skills. There is no model that is effective for every student; teachers require a variety of models. They are, however, tools that assist good teachers in teaching more effectively by making their instruction more systematic and efficient (Eggen and Kauchak, 2012). Considering the use of the integrative model above, it can be seen that the integrative model is one of the best models to be used at teaching and learning activities because it is applied for teaching units of instruction that incorporate conceptual knowledge, foster critical thinking, and involve making connections between information learned and making meaning from daily experiences.

### ***An Overview of ICT Competences***

Information and communication technology (ICT) has evolved and transformed our society, fundamentally altering how people think, work, and live. As part of this, schools and other educational institutions that are responsible for preparing students to live in a knowledge society must consider incorporating ICT into their curricula. Teachers are seen as key players in using ICT in their daily classrooms, in addition to preparing students for the current digital era. This is because ICT is capable of providing a dynamic and proactive teaching-learning environment (Ghavifekr et al., 2014).

In terms of ICT in educational field, UNESCO has developed the ICT Competency Framework for Teachers (ICT CFT) as a tool to guide pre- and in-service teacher training on the use of ICTs across the education system. To support this transformation, the ICT CFT organizes the ICT in Education-related competencies into three levels, they are Knowledge Acquisition, Knowledge Deepening, and Knowledge Creation. The first level is Knowledge Acquisition, in which teachers learn how to use technology and develop basic ICT competencies. The Knowledge Acquisition level requires teachers to be aware of the potential benefits of ICT in the classroom and to be able to manage and organize the school's ICT investments as well as to use technology to embark on lifelong learning and further professional development within national policies and priorities. The second level is Knowledge Deepening, in which teachers gain ICT competencies that allow them to facilitate student-centered, collaborative, and cooperative learning environments. Teachers can also link policy directives to real-world

action in the classroom, create technology plans to maintain school ICT assets, and forecast future needs. Furthermore, teachers can further their education by connecting to national and global teacher networks. The third level is Knowledge Creation, in which teachers acquire competencies that encourage them to model good practice and create learning environments that encourage students to create the kind of new knowledge required for more harmonious, fulfilling, and prosperous societies (UNESCO, 2018).

### **An Overview of Writing Competence**

Writing is also a complex cognitive activity that requires the writer to demonstrate control over multiple variables at the same time. Beyond the sentence, the writer must be able to structure and integrate data into cohesive and coherent paragraphs and texts (Nunan, 2003). Nunan also stated that students must consider three major issues during the planning process. The first step is for students to determine the purpose of their writing. Following that, students must consider the audience for whom they are writing, including language styles (formal or informal). Finally, students must consider the piece's content structure. Second, there is drafting. It is the initial draft of a piece of writing. Students should be given plenty of time at this point because they need to focus on the development of ideas and the organization of those ideas rather than the development of perfect grammar, punctuation, or spelling. Third, there is editing (reflecting and revising). When editing, students read what they wrote as a draft again to see if there are any errors (Nunan, 2003)

After the students have identified the errors, revise it. By doing so, mistakes can be reduced. The fourth



stage is the final version. The final stage is the version. After the entire process is completed, the students create the final version. It is possible that the final version differs significantly from the plan and draft. It occurs as a result of the numerous changes made during the editing process. Any unnecessary information in the draft can be removed. Furthermore, according to Harmer (Harmer, 2004), writing is the most difficult skill for L2 learners to master. Not only is it difficult to generate and organize ideas, but it is also difficult to translate these ideas into readable text. Furthermore, they state that the skills required for writing are extremely complex. L2 writers must pay attention to both higher level planning and organizing skills as well as lower level spelling, punctuation, word choice, and so on. The difficulty is exacerbated if their command of the language is limited. To summarize, writing as a language skill was chosen as the focus of this research because it is regarded as the most difficult skill for learners to achieve in terms of cognitive ability that students should acquire.

### **An Overview of Common European Framework References (CEFR)**

As a 21st century skill, the incorporation of Information and Communication Technology (ICT) into the educational field has been widely implemented. One of the global standard languages required for global standardization is the Common European Framework of Reference for Languages (CEFR). It has made significant contributions to language teaching innovation. It has promoted a significant shift in the perception of language proficiency from a teacher-oriented product to a learner-oriented process by focusing on providing language learners with a tool for (self-)

evaluation (Lowie, Haines, and Jansma, 2010).

The Common European Framework of Reference for Language was created to provide a transparent, coherent, and comprehensive foundation for the development of language syllabuses and curriculum guidelines, the development of teaching and learning materials, and the assessment of foreign language proficiency. A number of educational institutions have adapted their curricula and programs in accordance with the CEFR in order to meet current challenges and maintain global educational competitiveness (Athanasidou et al., 2016).

Additionally, CEFR also categorizes language ability into six levels: A1, A2, B1, B2, C1 and C2. These levels represent ascending language ability from beginner to advanced. These levels are classified into three levels of proficiency. A1 and A2 belong to the beginner level, which is known as Basic User, B1 and B2 belong to the intermediate level, which is known as Independent User, and C1 and C2 belong to the advanced level, which is known as Proficient User. The purpose of using CEFR descriptors in this study is to provide a common basis for the development of recognizing the level of students transferring from overseas universities, as well as to provide a clear indication of what each learner should be able to do at different levels. As a result, the CEFR descriptor, which describes the knowledge, skills, or topic that will be learned, is included in the lesson plan.

Academic writing is at the B2 level of the CEFR in terms of the students' level and the purpose of the course. The B2 level is known as an Independent User. Students should be able to understand the main ideas of complex texts on both concrete and abstract

topics, including technical discussions in their field of specialization, at this level. They must also be able to write clear, detailed text on a variety of topics and explain a point of view on a current issue, including the advantages and disadvantages of various options.

### 3. RESEARCH METHOD

Richey and Klein's Design and Development Research was used in this study because it was thought to be appropriate with the research's objectives to design a teaching model. According to Richey and Klein (Richey Rita C, 2007), designing research is a planning process. The blueprints that guide researchers through their projects have been dubbed research designs. A research design establishes the broad framework of a study, addressing each stage of the investigation. However, research designs are not strict guidelines for completing a study. Expert researchers design their studies and then implement them with flexibility as situations arise as their projects progress.

Richey and Klein (Richey Rita C, 2007) stated that six major components comprise the design and development knowledge base. These six facets focus on various aspects of the design and development enterprise: (a) learners and how they learn, (b) the context in which learning and performance occur, (c) the nature of content and how it is sequenced, (d) the instructional strategies and activities used, (e) the media and delivery systems used, and (f) the designers themselves and the processes they use. Richey and Klein (2010) also provides specific project phase in Design and Development Research such as; **Analysis, Design, Development, and Evaluation**. The formative evaluation occurred in three

stages in the design and development effort. These were:

1. An expert review of content and user interface design during the development phase.
2. One-on-one evaluations of the instruction prior to tryout.
3. A full-scale tryout (Richey Rita C, 2007)

Subject matter experts, programmers, instructional designers, and trainers conducted the expert review. The team was made up entirely of designers and developers. Throughout the development process, their suggestions served as the foundation for course revisions. Additional course revisions resulted from these evaluations. To summarize the preceding explanation, obtaining usable knowledge from experts is critical, as is a review by a subject matter expert. As a result, any experienced researcher understands that he or she must accommodate time and cost constraints in order to receive feedback from experts on their design (Richey Rita C, 2007). In terms of formative evaluation, this research did not employ the three forms of formative evaluation as stated above concerning to the constraints occurred during the process of designing the prototype, thus expert review was chosen as the formative evaluation of this research. Regarding the study's limitations, such as time constraints and limited access to data, each limitation could not be overcome using the entire triangle method (document analysis, interview, and observation). An observation was conducted as the first step of DDR (need analysis) at University A (regarding the research ethic, the researcher coded the source of data) to determine the use of ICT competencies in teaching and learning activities (Richey Rita C, 2007)

## Data Collection

Depending on the focus of the research, data collection in a developmental study can take a variety of forms. Documentation of design, development, and evaluation tasks, including profiling the design and development context and data collection: work time and expenses, problems encountered and decisions made, changes made to original plans, designer reactions and attitudes, or records of concurrent work patterns (Richey and Klein, 2005). Below is provided data collection for design and development research:

## Analysis

In this step, the researcher conducted a need analysis to determine the implementation of ICT competencies in existing teaching models. Data for this step include ICT Competence Indicators, Expert Models of Teaching Concepts, CEFR descriptors, and Writing Courses documents (theories), videos, journals, websites, and any other information that assists the researcher in answering the research question. While the data sources include a literature review of ICT competencies, a CEFR descriptor, models of teaching design and writing competences, and observations of teaching and learning activities in writing courses from various universities. To conduct the need analysis, the following instruments were used: ICT competence indicators, CEFR descriptor, questions, and an observation sheet.

## Designing the preliminary models of teaching

This step is concerned with designing prototype models of teaching in the form of lesson plans. This step's data includes the creation of instructional models (lesson plans), teaching

procedures, materials, and an evaluation instrument. While the data source is the result of an analysis of existing teaching models that are related to ICT competence indicators. In terms of the instrument, ICT competence indicators and the CEFR descriptor were used.

## Developing the preliminary models of teaching

The prototypes of teaching models were developed and evaluated by subject-matter experts in this step. This is an example of an internal validation study.

## Evaluating the product

In this step, evaluation data were collected from subject matter experts to examine the newly design of ICT competences models of teaching.

## Data Analysis

Data analysis and synthesis in a developmental study are similar to those in other types of research. There will almost certainly be descriptive data presentations and qualitative data analyses based on documentation, interviews, and observations (Richey and Klein, 2005). Data analysis conducted is described as follow:

- Investigating and collecting appropriate theories related to ICT competences, Models of Teaching, CEFR descriptors, and writing competences for further analysis and discussion.
- Examining existing teaching models.

This step was carried out after observing a writing teaching and learning activity at University A. Analyzing the ICT competencies demonstrated by the writing lecturer and students at University A, comparing them to the indicators, and identifying gaps.



- Choosing the ICT competences indicators that would be incorporated into models of teaching component. Below ICT competences indicators that has been chosen to be infused into the prototype:

ICT Competences Indicators	UNESCO's Approach		
	(KA)	(KD)	(KC)
1. Recognizes a wide range of technological tools and some ways of integrating them in educational practice	✓		
2. Uses various channels and languages associated to ICT to communicate with the educational community	✓		
3. Uses ICT to record and track what he/she lives and observes in his/her practice, context and of his/her students	✓		
4. Organize students and ICT in a learning environment to support teaching and learning.	✓		
5. Identify and manage Internet conduct and safety issues	✓		
6. Model the principles of digital citizenship	✓		
7. Analyze and evaluate digital resources.	✓		
8. Describe how ICT can support project-based learning.		✓	
9. Identify a real-world problem to support project-based learning.		✓	
10. Design learning activities to engage students in reasoning with, collaborating on, and solving real-world problems.		✓	
11. Implement collaborative, project-based lesson plans, and provide guidance to students towards the successful completion of their projects		✓	
12. Operate software packages that are appropriate to subject areas to encourage higher-order thinking in students.		✓	
13. Evaluate the accuracy and usefulness of web resources and web-based tools in support of subject areas.		✓	
14. Use digital communication tools to support student collaboration within and beyond the classroom.		✓	
15. Use interlinked digital devices to establish a network comprising students and the teacher, allowing them to share digital resources and work collaboratively on lesson activities.		✓	
16. Access, evaluate and disseminate digital resources to support student-centered learning activities and social interactions.		✓	
17. Use ICT networks to access and share resources that support professional development goals.		✓	
18. Guide students to make appropriate ICT choices to achieve curriculum standards that support reasoning, planning, reflection and knowledge building.			✓
19. Design online materials and activities that engage students in collaborative, problem-solving research			✓
20. Design project plans and activities that engage them in collaborative, problem-solving research or artistic creation.			✓
21. Create digital media resources that support their learning and interaction with other audiences			✓
22. Foster innovation by promoting continuous learning among colleagues			✓
23. Share and discuss best practices in teaching via professional communities			✓
24. Organize digital knowledge building environments to enhance teaching and learning.			✓

Sources: Adapted from UNESCO ICT-Competences Framework (UNESCO, 2018)

- Infusing ICT competencies into teaching component models in order for them to be ICT component-integrated teaching models.
- Designing ICT competence-integrated models of teaching by organizing and arranging the ICT competence-integrated models of teaching components in the teaching design models
- Seeking expert advice and judgment on newly designed teaching models. The experts are the researcher's supervisors.
- Evaluating.

#### **4. RESULT AND DISCUSSION**

##### **4.1 The Analysis of ICT Competences in Existing Models of Teaching**

Sentence Writing, Paragraph Writing, Essay Writing, Creative Writing, and Academic Writing are the five writing courses offered at University A. In terms of the limitation, the researcher only observed one writing course, which was essay writing. The observation sheet was adapted from Harmer(Harmer, 2004) theories of phases in teaching writing and the UNESCO framework. The following is an observation finding from a teaching and learning activity:

1. The teaching models used during the teaching and learning activity are Scaffolding is a cognitive approach with a Scaffolding model. It can be seen in the teacher's role, as the teacher guides the students through learning and the students proceed step by step while the teacher assists as needed. The use of scaffolding strategies in writing instruction (from University A) revealed an increase in students' interest in learning to write as the

teacher guides students through step-by-step processes such as browsing ideas, drafting, and evaluating. It backs up the findings of a previous study by Padmadewi and Artini (Padmadewi and Artini, 2019), who found that scaffolding strategies improved not only writing quality but also students' attitudes and interests.

2. The employment of ICT competencies falls into the categories of Technology Literacy, Knowledge Deepening, and Knowledge Creation. However, since the use of ICT as a tool to deliver teaching materials and as a search engine to access the internet, Knowledge Deepening has dominated as the ICT level employed in teaching and learning. However, the use of writing on a piece of paper then rewriting it on a whiteboard to be discussed is deemed ineffective because it takes time for students to rewrite their written task on a whiteboard. To summing up, materials written on whiteboards are usually left for long enough for students to copy them into their notes. As a result, it is suggested that students and teachers spend as little time writing as possible during a lesson.

##### **4.2 The Design of ICT Competences-Integrated Models of Teaching of Writing Course for English Language Study Program**

After finding the gaps between the existing models of teaching, and the theories, formulating and analyzing the data descriptively, the researcher design the prototype ICT competences models of teaching of Writing Course for English Language Study Program.

Below is the prototype Models of Teaching purposed by the researchers:

Core Materials: Writing a Research

CEFR Level: B2

Standards Addressed:

Common European Frameworks of Reference for Language (CEFR) as the standards for Academic Writing learners as Independent User:

1. Can write an essay or report that develops an argument systematically with appropriate highlighting of significant points and relevant supporting detail.
2. Can evaluate different ideas or solutions to a problem.
3. Can write an essay or report which develops an argument, giving reasons in support of or against a particular point of view and explaining the advantages and disadvantages of various options.
4. Can synthesize information and arguments from a number of sources.
5. Can follow the essentials of lecturers, talks and reports and other forms of academic/professional presentation which are propositionally and linguistically complex.

UNESCO ICT Competency Frameworks as the standards for unit plan:

1. Students demonstrate the responsibility in using technology system, information, and software
2. Students select and use online exercises appropriate to their individual needs
3. Students explore real-world issues and solve authentic problems using digital tools and resources
4. Students create a resource that allows other students to locate and retrieve materials that are posted online

5. Students use, analyze, evaluate information resources to support research and learning

Learning Objectives:

1. Students will be able to write an essay for academic needs (background of research)
2. Students will be able to identify parts that comprise a scientific research paper
3. Students will be able to understand some different ways scientists develop ideas for their research
4. Students will be able to understand what to include/exclude in the various sections of a research paper (introduction, literature review, method, discussion, references)
5. Students will be able to demonstrate complex cognitive skills such as problem solving, collaboration, and critical thinking.

Prerequisite Skills:

1. Students should be able to construct paragraph for verb-tense consistency and correct punctuation
2. Students should be able to write the order in which words occur and the way words change according to their relationship with other words
3. Students should be able to review the basic grammatical structures such as subjects and verbs
4. Students should have advanced level of vocabulary

Materials: The detail materials are attached and available to be downloaded on <https://new.edmodo.commmmm/groups/LAgroup>.

**\*the prototype of ICT competences Models of Teaching (teaching and learning activity) is provided at the explanation of teaching and learning activity below:**

Teaching and learning activities (TLA) are divided into two categories: **on-campus and off-campus**. On classroom denotes that the activity is taking place in the classroom. The term "off classroom" refers to an activity that takes place outside of the classroom (online learning). The **role of the lecturer** is no longer the only initiator of language. Students should be encouraged to ask questions, make comments, and negotiate certain options in learning where appropriate. More student-student interactions can now take place in pairs, small groups, and whole-class activity.

#### TLA (On Classroom):

- **Lead in (prepare for the activity)**  
This activity takes about 3-5 minutes before the class started. In this activity, the lecturer leads the students into the materials by activating students' background knowledge. Lead in may take place by asking questions such as; *what do you know about this? have you heard or learnt about this before?*, and other related questions that stimulates students previous knowledge or information about the new materials. This may help to raise motivation or interest the students toward the materials. In conducting this activity, the lecturer and students incorporate common-hardware i.e. **Laptop, LCD, Projector, and using presentation software** to discuss the materials)
- **Introduction (setting up the activity)**  
Lecturer gives clear instructions for the activity by presenting a demonstration or example of how to write background of research or other topic related to writing a research. This is believed to be much more effective than a long explanation. Lecturer needs to make sure that students mainly get practice in

the range of real-life writing task that they will face. As far as possible, select the task most relevant for their needs such as writing long-term project (writing a small-scale research for undergraduate program).

After introducing the task, make sure students are clear what they have to do. They need to know the genre (report, article, or journal, etc.), who they are writing for and why. Avoid bland, 'genre-free text for no particular audience' writing task. Then, lecturer may check back the instruction have been understood by asking question such as; *Rina, what are you going to do first?, etc.*

- **Presentation/ Describe, Compare, and Search for Patterns**

Together with students, examines a variety of resources—books, websites, and journal transcriptions—to gather information about conducting a journal or research in literary works. As students engage with these materials, the lecturer asks them to complete a graphic organizer) about Writing Research.

As a class, the lecturer models how to complete the graphic organizer. Some students fill out sections on their own, and others need help by seeing the lecturer model it. The lecturer needs to scaffold students learning by asking them general questions such as:

1. *What do you see here?*
2. *What do you notice in these graphic organizer?*

In many cases, the lecturer needs to ask more specific questions to describe and compare the information collected, such as:

1. *What is writing a research?*
2. *What is the basic structure of a typical research paper?*
3. *How do you start to write a research?*

4. *How do you identify a problem in a research?*
5. *What types of research methods might be possible to investigate your phenomenon of interest?, etc.*

Students become familiar with the information more easily when they have to describe it, search for patterns within it, and compare the facts, concepts, and details presented within it. Lecturer might provide guidance through instructions communicated in written (e.g., worksheets, multimedia presentations, or websites) or other formats (e.g., audio, visual, or multimedia materials).

- **Guided practice/ Explain similarities and differences**

Lecturer asks students to examine and verbalize some comparisons and patterns between the different of the phenomenon of interest, theories, data, method, of other scientific writing. Then the lecturer asks the similarities and differences by asking question *“How can you explain the selected text (e.g., report and article text) In what ways are they different? Alike? Explain.* Lecturer help students to study one or more samples of written texts similar to the one they are writing.

- **Independent practice/ Hypothesize outcomes for different conditions**

In this phase, students use existing knowledge constructed in the first two phases to hypothesize outcomes for different conditions related to the materials and achieve deeper meaning and understanding. One way to have students form hypotheses is to ask them to brainstorm ideas for what they are studying under different text. Lecturer and students do brainstorm ideas as a whole class. Use board, or LCD projector to collect as many ideas as possible. In small groups, students may speak and take note

After this discussion, the lecturer asks the students to devise hypotheses of what might have been different if text were different. For instance, the lecturer ask students to think about their focus style, information, lay out, etc: *“how is the text to be laid out, paragraphed organized? Are there any specific rules? (e.g. if it is an article, report, etc)? are there things that must be included or stated in certain way? Explain.* Ask students to provide support for their hypotheses by writing them down or displaying the justification by using any available classroom digital equipment). As students reply, the lecturer should type students’ responses on the available digital equipment.

Then, students may write start writing their first draft by carefully go through their own text, checking if it says what they want it to, if it reads clearly and smoothly, if its language is correct, and so forth.

- **Get feedback**

Lecturer or other individual students or groups can read and make helpful comments and suggestion about a text. This help may be on the content and message, the organization, the language, and so on. For the lecturer, rather than simply ‘mark’ a text, it is great when students can respond to it in some more realistic ways.

- **Edit**

Based on the feedback, students may revise and write finished text.

- **Generalize to form broad relationships**

Ask students to form broad generalizations or big ideas that summarize their learning about writing a research. Be sure to ask them to substantiate their inferences by referring



back to the graphic organizer they completed together as a class. Examples of possible student responses are the following: *“Not all structures in writing a text are the same, and each structure is dependent on the nature or worldview itself, as well as the purpose of the writing. If a writer's goal is to persuade readers, the structure of writing research is inappropriate to use”*, etc.

#### • **Closure**

The lecturer asks students to summarize in small groups what they have learned about Writing Research by (1) discussing what they have learned, (2) writing a short summary of their learning about Writing Research, and (3) sharing with the class the group summary.

#### • **Assessment**

The assessment is non-test form in which the lecturer check students' understanding toward the concept of Writing Research as they study the unit. Then, students write their first draft Background of Research and share it to [https://new.edmodo.commm/groups/L\\_Agroup](https://new.edmodo.commm/groups/L_Agroup).

#### **TLA (Off Classroom)**

The activity is in the form of Self-Learning and Structured Assignment

- Students utilize **smartphone or notebook** to search and retrieve related materials and platforms that have been presented and suggested by the lecturers
- Students write their **first draft of Background of Research**, and post it into **Edmodo** or **Google Classroom**
- Students obtain the lecturer's Feedback

- Lecturer and students provide supporting **online resources** for the next class meeting.

## 5. CONCLUSION

This study aims to incorporate ICT competence frameworks into writing teaching and learning activities in order to promote the use of international standards and beneficial competences for students in their current situation and needs. However, the study's findings revealed that ICT competencies have not been fully integrated into current teaching and learning activities. It is also suggested that future research re-align the models of teaching design to be in line with the ICT frameworks and indicators provided in this study. The change is expected to standardize the writing course and provide students in the English Language Study Program with ICT skills.

The study discovered some limitations. There is still work to be done in order to achieve an ideal state of ICT-competences standards-based writing models of teaching. The process of gathering existing teaching models was the most difficult part of conducting this research. This was a difficult part for the researcher because many writing lecturers refused their teaching and learning activity to be observed. As a result, the researchers advise universities to be more cooperative with writing lecturers and researchers if the researchers adhere to research ethics.

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3

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