#### CHAPTER 1

#### INTRODUCTION

This chapter provides general outlines of the study. It covers background of study, statement of problems, aims of study, scope of the study, significance of the study and organization of the thesis.

# 1.1. Background of the Study

The Industrial Revolution 4.0 is expanding in every aspects of human life nowadays. One of the main aspect in the Industrial Revolution 4.0 is the use of Information and communication technology (ICT). ICT has been growth in every aspects of human life. The use of phone for example, is not only for telecommunication nowadays. Phone can be used to take pictures, online banking, read news, study, finding information on the internet, and other activities just in one device. This rapid growth of ICT should be in accordance with human capability in integrated the ICT to their life.

Education is one of the aspects that should adapt with the Industrial Revolution 4.0. The use of ICT in education is a hot topic in this decade. The concern of this topic is how to integrate ICT into the teaching learning process and the capability of teacher and students to utilize ICT in education because there is a need for students and teacher to master 21<sup>st</sup> century skills.. One of the skills that must be possessed is communication skills using information and communication technology (ICT). The university as the organizer of education is expected to be a place for the skills training for its students. The campus can be developed into a modern institution that can understand future needs, is expected to be a place to equip students with 21<sup>st</sup> century skills. Therefore, the quality of learning needs to be improved. One strategy to improve the quality of

learning that needs to be optimized by modern campuses is to hold ICT-based learning.

ICT-based learning is learning that integrates ICT in its management. Therefore, a
model is needed to carry out ICT-based learning activities at the University.

Information and communication technology (ICT) is a technology that makes information a processed commodity (Tsvetkova, 2016). The implementation of education in the form of learning in schools or colleges is full of information that must be processed by learners and instructors so that it becomes something meaningful. Learning from learner's perspective is shown by how important and interesting information is so that it can be assimilated into something meaningful. In other side, from the instructor perspective, learning can be done by how the information is presented or delivered so that learners can easily accept it. This is where information technology will play a very important role in how to process teaching materials as a form of information so that it is interesting, easily accepted and every student has the same opportunity to get it. Therefore, every element of education related to students, educators, interaction between educators and the environment and educational infrastructure must be considered so that educational goals are achieved.

In the era of ICT-based education, teacher is not only roled as a teacher but also a facilitator, mentor, coach, director and study partner for students. Therefore, the teacher can give a large choice and responsibility to students to experience learning activities. With the role of the teacher as intended, the role of the Student also changes, from passive participants to active participants who generate and share knowledge / skills and participate as much as possible as an expert. On the other hand, Students can also learn individually, as well as collaborating with other students. To support the ICT integration process in learning. In this case (UNESCO, 2018) has compiled the ICT Competency Framework for Teachers, a framework that lists the competencies needed

by teachers to integrate Information and Communication Technology (ICT) in teaching and learning activities and professional practice of teachers. The ICT Competency Framework for Teachers aims to help countries develop comprehensive national teacher ICT policy and standards, and must be seen as an important component of overall ICT in the Education Master Plan.

The Indonesian government has made government policy in the Republic of Indonesia Government Regulation Number 74 of 2008 concerning teachers. The policy is stated in Article 3 which outlines 4 competencies that must be possessed by a teacher, namely pedagogic competence, personality competence, social competence, and professional competence. The same thing is stated in *Permendiknas* No. 16 of 2017, based on the ministerial regulation, teacher competency standards in utilizing ICT in the classroom are in pedagogical and professional competencies. Pedagogic competence at No.5 states that utilizing information and communication technology for the benefit of learning, while Professional Competence No.24 states that utilizing information and communication technology to communicate and develop themselves. In the world of education, the Ministry of Education and Culture (Kemdikbud) has placed ICT as one of the main supporters of the availability of education services. The provision of competent educators operating throughout Indonesia has been declared as one of the strategic objectives in the implementation of national education. Providing educators who master ICT competencies is an urgent need to achieve these goals. (Regulation of the Minister of National Education of the Republic of Indonesia Number 16 of 2007 concerning Academic Qualification Standards and Teacher Competencies)

The use of ICT can be used as a problem solving in the learning process, and can also be an innovation in the world of education. Teachers are required to be able to use Information and Communication Technology media in the learning process in the

classroom. Mastery of teachers in the use of information and communication technology greatly influences teacher mastery in the use of learning media (Wachida, 2017). Because there are many ICT-based learning media that are currently being developed, the teacher's ability to use ICT tools is very important. ICT media that can be used by teachers in learning is certainly a lot, not just presentation media. Many online and offline media, software and hardware, which teachers can use as learning media. Online media, for example, teachers have used email facilities for task collection facilities, blogs to send teaching materials so students can easily get learning materials. Offline media such as videos and images that can be used by teachers to create learning media. Hardware such as computers, projectors, televisions, radios, telephones and many others, software such as the use of media presentations, interactive learning, and more.

The lecturer is an instrument that greatly determines the success of the education process, because the lecturer acts as a direct implementation in learning, in addition to being a motivator, facilitator and evaluator for students in obtaining and processing knowledge in order to qualify for themselves and the nation (Ishaq, 2015). Major changes due to the development of ICT in the world of education occur in the paradigm of the pattern of delivery of educational information. In the old concept the information delivery model was developed in the form of educators (teachers) who acted as experts who conveyed information to students (students). Through the use of communication and computer technology, this paradigm then shifted towards a student-centered model.

One way to use ICT in learning is to integrate it into the subject taught by the teacher by using e-learning both online and offline. As a result of the information delivery paradigm that emphasizes students' approaches to searching and processing their own knowledge, it indirectly contributes to changing the paradigm of learning

management systems and methods from conventional systems to modern ICT-based systems. The integration of ICT in the scope of learning at the University is very important, especially referring to government policy on university education, which expects ICT-based teaching and learning.

This study focuses on two subjects which related to teaching English. These teaching-related subjects are English for Specific Purposes (ESP) and Teaching English for Young Learners (TEYL). The use of ICT in these two subjects nowadays is a great deal, because the process of collecting and retrieving data, searches for both journals and scientific books that can be retrieved from modern devices (ICT Media). Therefore, learning teaching-related subjects by using Information and Communication Technology (ICT) is expected to be one solution to be able to further increase the understanding and motivation of teachers and students about learning materials as well as to recognize, understand the related modern technology. In order to avoid the implementation of learning that still uses the lecture method, learning that is less varied, less attractive or less enjoyable for students. Using ICT tools can help students to be able and quick to understand the material being taught.

Syllabus is a learning plan for a particular subject and / or group / theme that includes competency standards, basic competencies, subject matter / learning, learning activities, competency achievement indicators for assessment, assessment, time allocation, and learning resources. The Foundation for the Development of the Syllabus: Republic of Indonesia Government Regulation Number 19 of 2005 concerning Education National Standards article 17 paragraph (2) and Republic of Indonesia Government Regulation Number 19 of 2005 concerning Education National Standard article 20.

As a previous study shown by Nugroho (2017), the result of his research shows that competences in the existing Syllabuses have not met the standard competences of the EPG based key teaching competences. Key teaching competences is covered in the one of category of European Profiling Grid (EPG). In this study, the researcher has pointed methodology: knowledge and skills as one of the competence to become the object of the syllabus design. The problems are the descriptors are not covered at all subjects.

Based on the previous research, ICT competences in the existing syllabuses have not met the standard competences of the European Profilling Grid (EPG). In this study, the writer will focus on integrating ICT Competence towards teaching-related syllabuses (ESP and TEYL).

### 1.2. Research Questions

Refers to the the problem statement, the main problem of this research is:

# How are The ICT Competences Integrated into Teaching-Related Syllabuses for ELESP?

This main research question is dropped down into some sub-research problems which are:

- 1. To What Extent are The ICT Competences Integrated Teaching-related Syllabuses for English Language Education Study Program (ELESP)?
- 2. How are The ICT Competences Integrated into Teaching-related Syllabuses for English Language Education Study Program (ELESP)?
- 3. How are The Designs of ICT Competences-integrated Teaching-related

  Syllabuses for English Language Education Study Program (ELESP)?

## 1.3. Purposes of the Study

Based on the problem identification above, the main purpose of this research was to design ICT Competences-Integrated Teaching-related syllabuses for ELESP. In designing those kinds of syllabuses, the researcher needed to conduct some analyses. The analyses are described by the research sub-purposes as followed:

- 1. To analyze and describe the existing Syllabuses of Teaching-related Courses in ELESP.
- 2. To describe the procedure of designing process of ICT competences integrated Syllabuses of teaching-related courses for ELESP.

3. To design ICT competences integrated teaching-related Courses syllabuses for ELESP

## 1.4. Scope of the Study

This study focused on designing ICT Integrated Teaching-related syllabus for ELESP. The teaching-related syllabuses are English for Specific Purpose and Teaching English for Young Learners. The European Profilling Grid (EPG) and UNESCO ICT Competency Framework was used as the guidelines in designing the ICT Competences-Integrated Syllabuses.

# 1.5. The Significance of the Study

This study hopefuly can contribute to the field of education, especially in the field of developing Syllabus based on ICT Competences. It also expected to give some ideas for the lecturers to develop any other ICT-based syllabus. Moreover, the result of the research is expected to provide more explanation and understanding related to what should be in the syllabus of those two courses.

### 1.6. Clarification of Related Terms

Information and Communication Technology' (ICT) first appeared in the mid-1980s and was defined as "All kinds of electronic systems used for broadcasting telecommunications and mediated communications", with examples including personal computers, video games, cell phones, internet, and electronic payment systems and computer S/W etc. The ICT is made of computer and communication technology. The computer technology is the tool for storing and processing information in digital form while communication technology helps us to transfer and disseminate digital information (Assikuzzaman, 2014).

Additionally, ICT means a variety of technological applications in the process and communication of information. The word ICT is a combination of two words information, communication & technology. Information means knowledge and technology means the use of computer & communication. The term ICT can be defined as "the integration of computing, networking, and information processing technologies and their applications" Thus, ICT means a combination of computer applications' and communication technology for gathering, processing, storing and disseminating of Information.

#### 1.7. State of the Arts

This research focuses in designing ICT Competences-integrated Teaching-related syllabuses. The teaching-related syllabuses in this research are English for Specific Purposes Syllabus and Teaching English for Young Learners Syllabus. The study is expected to give contribution for the educational field especially in the ICT-based curriculum development. This research hopefully can fill the gap between the existing syllabus, and the use of ICT in development of curriculum. ICT should support the teaching and learning process. It can be concluded that the novelty of this research is the use of ICT in designing Syllabuses for ELESP and in developing curriculum in its application in teaching-related subjects.

