

CHAPTER I

INTRODUCTION

1.1. Background of the research

The world is developing very rapidly as well as science. Along with the development of technology, the teaching system has entered an equally rapid change, including in the field of language teaching. Language teaching needs to be done effectively because language is communication tool used in social life. (Amalia, 2017, p. 2). Then, the teacher development as teacher reflectivity review aimed to get main understanding of their teaching. (Farrel and Richard, 2005, as cited in Agustrianita, 2017, p. 8).

Teacher development is needed by experienced teachers to explore their teaching experienced teachers need opportunities to develop their role changes, explore their teaching in the classroom by conducting some experiments, and enrich their knowledge and skills. (Gebhard, 2005 as cited in Agustrianita, 2017, p. 8). The profile characteristics of English language teacher that can help most importantly first boost the students' motivation and interest to learn English. Studies have explored in general the characteristics of effective language teachers, however for what extent has it identified the factors (Zarina, Shahizan, Azizah, 2016, p. 2).

Analyzing needs is one of the important activities in designing learning. This is in accordance with the design objectives developed to help solve the learning needs of students and the teaching needs of teachers whose interactions are realized in the learning process. Sanjaya (2010) said that needs assessment is an integral cycle with program development, implementation and evaluation. Designing learning that begins with the study of needs allows the results to be optimally utilized by individuals who need it related to ICT-based learning. The goal to be achieved from this study is to identify the factors teachers need in ICT-based learning (p. 92).

In the Government of Indonesia Number 74 of 2008 on Teacher's article three paragraph four stated that pedagogical competence that must be mastered by teachers in the management of learning participants, one of which is the use of learning technology. As well as teachers also utilize information and communication technology to communicate and develop themselves. Based on the minister's statement above, the use of information and communication technology should really be applied to the learning process to achieve learning goals. But if the condition of the choreography and facilities of learners do not allow for teachers to use technology as a support for learning to eat simple technology can be an alternative learning media (Nurdiansah, 2017, p. 4).

The learning model currently applied the school's places learners as the main component in the learning process (student center) and teachers as a supporting component of learners in achieving the competence of the lessons taught. Therefore, teachers should have adequate behavior and competence to develop learners as a whole. There are three teacher competencies that must be mastered by a professional teacher, namely personality, social and professional competencies. One of the personality abilities that must be possessed by teachers is that the teacher is able to develop himself in accordance with the renewal in the field of his profession and his specialization. In responding to the ever-evolving advancement of science and information technology, a teacher must be able to keep up with every change that exists. Teachers need learning media as a support for learning. The role of media is very important in the learning process because it makes it easier for learners to understand the material. Utilization of learning media based on information and communication technology is one of the media choices that can be used in the learning process because it allows utilizing interactive media, thus allowing learners to interact further with the media utilized. In addition, it can provide new experiences for learners who are too saturated with conventional learning models that teachers do in this case lecture methods. In addition, the media used by teachers can also increase learning motivation and attract the attention of learners. Most school institutions have

utilized the media to support learning carried out with the aim to improve the quality of high-quality human resources and skilled in utilizing existing technology. Another problem in this era of globalization is the mastery of information technology by teachers. It cannot be denied that there are still many of our teachers who still do not master information technology. Whereas information technology today if used properly it can help and facilitate the tasks of teachers in carrying out their tasks. Even for elementary school-level children today almost all of them already have mobile phones. Technological development cannot be prevented. however, the main problem is how we can utilize and direct our students to better utilization (Nurdiansah, 2017, p. 5).

Recognizing the important role of teachers and the growing demands of teacher professionalism in the 21st century, the government sets various policies aimed at improving teacher quality. One of the fundamental policies that overshadow various teacher quality improvement policies is the establishment of teacher quality standards through Law Number 14 of 2005 on Teachers and Lecturers and Permendiknas Number 17 of 2007 on Teacher Qualifications and Competency Standards. Referring to the legislation, the competency criteria of professional teachers are no longer limited to mastery of teaching or pedagogical competence, but also to the ability to develop professionalism continuously, the ability to become a learning agent, make scientific work in the field of education, and so on as stated in professional competence. Teachers are also required to be able to establish effective communication with fellow educators, education personnel, parents, and the community as required in social competence and have a good personality as described in personal competence. In addition, teachers must also have adequate academic qualifications or educational background and are relevant to their teaching field. Academic qualifications are certain levels and fields of study that teachers have to be able to carry out their professional duties well. The standard of academic qualification for high school teachers is the minimum undergraduate (S1), higher education background with educational

programs that are in accordance with the subjects taught and the teacher profession certificate for high school (Andriani, 2012, p. 397).

Mastery of teacher competency standards and also the fulfillment of teacher qualification standards is evidenced by the ownership of educator certificates. An educator's certificate is a formal claim that a teacher has met the academic qualifications and competencies of the teacher. Educator certificates are obtained from certifications obtained through professional education programs organized by parties who have accredited educational personnel procurement programs. For teachers who have held an educator's certificate, he is entitled to the status of a professional teacher who is expected to be able to organize an effective teaching and learning process (Andriani, 2012, p. 398).

A qualified teacher is a teacher who meets or exceeds the standards of academic qualifications and competence of teachers and is able to accumulate them in the implementation of their professional duties. The availability of quality teachers needs to be pursued through various programs such as education, development and teacher training. Sondang (2002) said that the development of human resource quality is important to provide adequate knowledge and skills to carry out tasks; provide employees with the knowledge and skills they need to be flexible and adaptive to new strategies and technologies; provide the knowledge and skills required by personnel if given tasks they have never done; upgrade the knowledge and skills of personnel who have been obsolete as a result of the development of science and technology. In order to be effective, teacher quality improvement such as education, training and development should be an integral part in the military management process. Teacher procurement planning is an activity to identify the number and qualifications of teachers needed by the organization and the determination of various policies/programs to meet it. Recruitment and selection are the process of convening and getting teachers with the qualifications as needed. Procurement planning, recruitment, and selection produce information about the condition of new and old teachers from the aspect

of number and quality. This information is very useful as a basis in designing teacher development and training programs. Furthermore, the improvement of teacher knowledge and competence due to teacher participation in teacher quality improvement activities should be considered in placement activities, assignments, awards, compensation, and teacher performance assessment (Andriani, 2012, p. 399).

Based on the results of observations and interviews with teachers at Manba'ul 'ulum Kuningan High School already has facilities of 1 computer laboratory, information communication and technology (ICT) in the school environment should also be mandated in teaching and learning activities, because it can facilitate and make interesting teaching activities. But in the era of rapid technological development there are still many teachers who are not used to utilizing ICT in a maximal manner. They say that out of 9 teachers only about 3 teachers can operate the computer properly. Based on this description, the researcher wants to conduct research with the title “A Need Analysis of Teachers’ Professional Development of English Teachers in the 21st Century.

This research area in teacher profile has some cluster. For instance 21st Century skills and the English foreign language classroom (Yamith, 2013, Suherdi, 2012), Teachers’ perception toward social media to improve their competencies in English language teaching (Agustrianita, 2017, Chinago, 2015, Boholano, 2017), Teacher qualities for 21st Century learners (Faulkner, 2016), Being a professional teacher in the era of industrial revolution (Afrianto, 2018, Norahmi, 2017), Becoming the effective English teacher in 21st Century (Handayani, 2017, Husein, 2014). This previous research did not list the teacher qualification in the 21st Century although 21st Century theme was also mentioned in the previous study. The researcher no finds out a necessary thing such as the teachers’ professional development needs of English teachers in the 21st Century.

In addition, along with new development in science and technology, English has gained more prestige and new demands in its teaching and research. Hence, English teacher education should now be put in a new perspective. As far as Indonesia is concerned, as the researcher constantly argued, the perspective should be place between the two demands, the high demands of global world and the importance of deep-rooted local identity, especially religiosity. English teacher education should be designed to inculcate religiosity as the most empowering local identity as well as the global world related competences.

English teachers in this century should be aware that they should successfully lead their students to master high standard of English so that they will be able to make the best use of ICT to maximize their contribution. Global life also poses new challenges that might lead students to destruction. Some related data showed that while the number of Indonesian internet users is among the biggest in the world, the use is far from constructive purposes. That's why religiosity, local wisdom, good character and positive attitude should be integral part of the English teacher (Suherdi, 2012).

1.2. Identification of the issues

Based on the discussion and background of this study, analyzing of skills for teachers' competencies of English teachers in 21st Century is important to be discussed. Darmawan (2013) in various research and writing results, alleged that there are about 70 to 90% of teachers in utilizing ICT advances in the learning process and other activities are considered stagnant stuttering technology. If this condition is true, it would be sad and even painful. How not, because in the midst of the buzzing of interactive learning (e-learning) which must also involve its teachers in any field of study, it would be ironic if the teacher himself has never touched the information technology that has now penetrated into all sides of human life or in other words has gone global.

Therefore, teachers as educational mediators must always increase their professionalism needs along with the growing times in all fields, one of which is

the field of education. Teachers must be professional in accordance with the mandate of the law and teachers can integrate technology in learning, therefore, to increase the motivation of students in learning to be high, thus very influential on student learning achievement. The reason why the researcher chose this research is because in modern era there are many teachers in the several schools who have not mastered technology.

1.3. Delimitation and focus of the research

The researcher would like to restrict this research's scope. The limitation of this research is that the writer focuses on examining and researching the the need of teachers' competencies for English teachers in Islamic boarding school (SMA Manba'ul 'ulum Kuningan). This research focuses on the competence and skill of English teachers in the production of English learning materials and on something that is required.

1.4. Research Questions

The research questions of this research are stated as following:

- 1) What are the teachers' competencies in the 21st Century?
- 2) What are the needs of teachers' competencies of English teachers in the 21st Century at Senior High School?

1.5. Aim of the research

As formulated in the research questions, the objectives of this study are:

- 1) To find out the teachers' competencies of English teachers in the 21st Century
- 2) To analyze the need of teachers' competencies in the 21st Century at Senior High School

1.6. Significances of the research

This research is expected to give significant advantages both theoretically and practically.

Theoretically, it would be help for English teacher in increasing teacher's competencies in 21st Century at senior high school. The teachers also can understand the need of teachers' competencies in learning process and it would be a positive reference and knowledge to improve your insight to become a good educator or teacher in 21st Century.

Practically, based on the result can be used as a guidance of teachers, readers, evaluator for teachers' competencies of English teachers in the 21st Century at Senior High School.

1.7. Theoretical foundation

This research consisted of some theory's usage. This subtopic elaborated the theoretical foundation related to the topic of the research. It provided information about teachers' competencies in the 21st Century at Senior High School.

1.7.1. Need Analysis

Need analysis is the process of acquiring information about the needs of learners; it looks at what the learners already know as well as what they need to know. In Basturkmen (2010), Dudley-Evans and St John described need analysis as the process of identifying what and how a course should be given. Furthermore, the learners, persons working or studying in the sector, ex-students, and resources related to the topic are the major variables for requirement analysis (Dudley-Evans and St John as cited in Basturkmen, 2010). In Nation and Macalister (2010), Hutchinson and Waters categorized

learners' requirements into two categories: target needs and learning needs. These two strategies will be explained in the following order:

1.7.1.1. Target Needs

Target define as what the learners need to do in the target situation (Nation and Macalister, 2010, p. 24). The important of target needs include necessities, lacks and wants.

1) Necessities

Necessity is a type of need dictated by the needs of the target context, and it is what learners should understand in order to perform well in that target environment. A businessperson, for example, may be required to comprehend business letters, communicate successfully at sales conferences, and gather information from sales catalogues, among other things. He or she must also be familiar with the language characteristics—discourse, functional, structural, and lexical—that are often used in the indicated scenarios.

2) Lacks

Lack is a limitation of wants that should be met. To establish which of the needs the learners are missing, first determine what the learners are now aware of. The goal competency must be measured against the learners' existing competence. The differences between the two might be referred to as the learners' deficiencies.

3) Wants

Want refers to what the students desire or imagine they need. Learners may have a decent concept of what is required in the goal circumstance. The students will definitely be aware of their shortcomings. However, it is very possible that the perspectives of the learners would differ from those of the other participants, such as course designers and teachers.

Furthermore, the analysis of target scenario needs includes asking questions about the target circumstance as well as the attitudes of the various players in the learning process toward that situation. The target scenario analysis frameworks based on Nation and Macalister (2010, p. 24) are as follows:

- 1) What are the language requirements? (1) for study; (2) for job; (3) for training; (4) for a mix of these; and (5) for some other reason, such as status, examination, or promotion.
- 2) In what context will the phrase be used? (1) tool: speaking, writing, reading, or listening; (2) channel: e.g., mobile phone, face-to-face; (3) Text discourse types, such as academic writings, lectures, and casual chat; (4) technical manuals and catalogues.
- 3) What will the subject matter be? (1) Subjects, for example, descriptive, textual, and narrative text; (2) business, engineering; (3) Level, for example, technician craftsman, postgraduate, secondary school.

1.7.1.2. Learning Needs

The learners' learning demands are how they will travel from our starting point to our destination. For example, consider linguistic skills, techniques, and topic knowledge. According to Nation and Macalister, there are numerous checklists for analyzing learning requirements (2010, p. 24-25):

- 1) Why are the learners enrolled in the course? (1) Required or voluntary; (2) Overt or covert necessity; (3) is there a stake in terms of prestige, money, or 13 promotions? (4) What do students believe they will accomplish? (5) How do they feel about taking an ESP or a general English course?
- 2) What sources do you have access to? (1) The number of teachers and their professional competency; (2) Teachers' attitudes about ESP; (3) Teachers' knowledge of and attitudes toward subject matter; (4) Materials; (5) Aids; and (6) Opportunities for out-of-class activities.
- 3) Who are the students? (1) Their age, gender, and nationality; (2) How much English do they already know? (3) What areas of competence do

they have? (4) What are their interests and hobbies? (5) Could you tell me anything about their sociocultural background? (6) What are the most common teaching approaches in English-speaking cultures? As a result, both target circumstance and learning demands must be considered. Language usage is investigated as part of the examination of target scenario demands. An assessment of the intended circumstance may reveal how individuals utilize language. It's also critical to understand how children learn to use language in the ways that they do.

1.7.2. The definition of 21st Century

The 21st century is a very different century to previous centuries. The extraordinary development of science in all fields. In this century, especially the field of Information and Communication Technology (ICT) that is sophisticated makes the world narrower. Because of the sophistication of ICT technology, diverse information from various corners of the world can be accessed instantly and quickly by anyone and from anywhere. Communication between personal can be done easily, cheaply anytime and anywhere.

Simply, 21st Century Skills refer to the skills that are required to enable an individual to face the challenges of the 21st Century world that is globally-active, digitally transforming, collaboratively moving forward, creatively progressing, seeking competent human-resource and quick in adopting changes on the basis of the historical development of 21st Century skills. Baholono (2017) argues that in the 21st Century, education highlights globalization and internationalization, namely by preparing teachers with technological skill in the teaching and learning process. Preparing competent teachers in the 21st Century education is very important, considering that a teacher must provide effective care by using technology (p. 21)

1.7.3. 21st Century Education

Education around the world in the 21st Century requires improving the education system in term of globalization, information, and competition to face the challenge of 21st Century. 21st Century education includes the change of conventional teaching which emphasizes on Low Order Thinking skills (LOTs) to the one which emphasizes on Higher Order Thinking skills (HOTs). (Fakhomah & Utami, 2019, p. 41). 21st Century in education delivery system has a substantial impact on how 21st Century skills develop in learners' pedagogy, curriculum, school rules and climate, assessment, and benchmarking skill acquisition are all key factors in the way 21st Century skills develop and mentioned. (Kim, Raza & Seidman, 2019, p. 10).

Since the advent of the global movement calling for a new model of learning for the 21st century, there has been growing opinion that formal education must be changed. These changes are important to bring about new forms of learning needed to address complex global challenges. Identifying the competencies of students that need to be developed is very important to face the 21st century. Students must hone skills and enhance learning to be able to cope with global challenges, such as critical thinking skills, the ability to communicate effectively, innovate and solve problems through negotiation and collaboration. Nevertheless, in terms of pedagogy has not been adapted to overcome the challenges of such challenges.

This learning experience should empower students as individuals and citizens as well as responsible, creative, innovative and able agents of change to society, the nation, and the world. Among the various competencies and skills that are expected to develop in students so that it needs to be taught to students in the 21st century include personalization, collaboration, communication, informal learning, productivity and content creation. These elements are also key to the overall learning of the 21st century. The National Agency for Professional Certification (BNSN) formulated 16 learning

principles that must be formulated in the 21st century education process. While Permendikbud No. 65 of 2013 presented 14 learning principles, related to the implementation of the 2013 Curriculum Meanwhile, Jennifer simplified it into 4 principles, namely: Instruction should be student-centered, Education should be collaborative, Learning should have context, Schools should be integrated with society. (Karim, 2017).

1.7.3.1. Instruction should be student-centered

Learning should use a student-centered approach. Students as subjects of learning who actively develop their interests and potential. It is the student who actively enhances his knowledge, potential and skills, in accordance with the capacity and level of development of his thinking, and is invited to contribute to solving real problems that occur in society. This does not mean that teachers give up control of learning to students completely but teacher intervention is still needed. Teachers act as facilitators who seek to help connect the prior knowledge that students already have with the new information they will learn, give students the opportunity to learn according to their respective ways and learning styles, and encourage students to take responsibility for the learning process. Teachers also act as mentors, who seek to help students when finding difficulties in the process of constructing their knowledge and skills (Karim, 2017).

1.7.3.2. Students must be able to collaborate with others

Students need to be encouraged to collaborate with their classroom friends to explore information and build meaning, appreciate everyone's strengths and talents and how to take on roles and adapt appropriately to them. Schools (including teachers) should be able to work with other educational institutions (teachers) in various parts of the world to share

information and experiences about learning practices and methods that have been developed, and are willing to make changes in their learning methods for the better (Karim, 2017)

1.7.3.3 Learning should have context

Subject matter needs to be associated with students' daily lives because learning won't mean much if it doesn't have an impact on students' lives outside of school. Teachers need to develop learning methods that allow students to connect with the real world. Teachers also need to help students find value, meaning and confidence in what they are learning and be able to apply in their daily lives. (Karim, 2017).

1.7.3.4. Schools should be integrated with society

Schools should be able to facilitate students to engage in their social environment, in an effort to prepare students to become responsible citizens. Students can be involved in various program development in the community, such as: health programs, education, environment, and so on. In addition, students need to be invited to visit orphanages to train empathy sensitivity and social care. With the power of technology and the internet, today's students can do even more. Students' social space is no longer just around the school or where they live, but can reach the layers of society that exist in various parts of the world (Karim, 2017).

1.7.4. Skills In 21st Century

According to Trilling & Fadel (2017) about “21st Century skills” that skills found in this list are:

1.7.4.1. Digital Literacy Skills

Digital literacy is the ability of relationships to receive information through technology. This includes how teacher who is able to use in

teaching process about digital literacy. Teacher will be able to receive information from the wider world through technology. All the more reason that our 21st century teacher need to acquire the skills to appropriately access, evaluate, use, manage, and add to the wealth of information and media they now have at their thumbs and fingertips (Trilling & Fadel, 2017). In general, digital literacy capabilities are capabilities that are based on communications are:

1.7.4.1.1. Information literacy

Understanding facts, figures, statistics, and data. Can convey and speak by the symbols used. Information literacy is related to media literacy. According to Trilling & Fadel (2017) if teachers have digital information literacy skills, they will have media literacy skills immediately.

1.7.4.1.2. Media literacy

Understanding the methods information is published. Understand and can talk about what information is in the media. In task especially teaching process in class, its skill will appear in task that using media for facilitate the task.

1.7.4.1.3. Technology literacy

Understanding the machines. It will appear in task that using technology.

1.7.5. Teachers' Competence

Competence is described as knowledge, skills, and talents managed by someone who has been a part of himself in order for him to do cognitive, effective, and psychomotor actions as well as possible. Usman (1994) defines competence as "the one item that describes a person's qualities or ability both qualitatively and statistically." This indicates that competence may be employed in two contexts: first, as an indication of ability that reveals the acts

seen; and second, as a term that encompasses cognitive, effective, and acts as well as the phases of execution as a whole. Competence, on the other hand, is a fundamental trait of an individual that is causally associated to criterion-referenced effective and/or superior performance in a variety of contexts. The term "underlying qualities" refers to a skill that is a fairly deep and persistent aspect of a person's personality and may predict conduct in a wide range of settings and activities. A skill is said to be causally connected if it causes or predicts behavior and performance. The term "criteria referenced" refers to the fact that the competency genuinely predicts who performs something well or poorly when tested against a certain criterion or norm (Spencer and Spencer, 1993, p. 9).

Based on the above explanation, it is possible to infer that competence refers to the capacity to put anything learned via education into practice. Competence refers to instructors' ability to execute and act logically in order to achieve specified criteria when carrying out educational duties. It is claimed to be logical since competence has direction and purpose, whereas performance is the observable behavior of a real person. According to Gordon, as cited by Mulyasa (2007, p. 38), the idea of competence has six characteristics or domains, which are as follows:

- 1) Knowledge is an awareness in the cognitive area, for example, a teacher understands how to identify learning requirements and how to execute student learning based on those needs.
- 2) Comprehension (understanding) is the depth of cognitive and affective knowledge held by humans; for example, a teacher conducting the research must have a strong comprehension of the qualities and conditions of learners.
- 3) Ability (skill) is anything that a someone possesses in order to do a task or job entrusted to him, such as the ability of instructors to select and build basic props to facilitate learners' learning.

- 4) Values are standards of behavior that have been believed and psychologically fused in a person, such as the typical behavior of instructors in learning (honesty, openness, democratic, and others).
- 5) Attitude is a feeling (happy, dissatisfied, loves, hates) or a reaction to an external stimulus, such as a reaction to the economic crisis, the sensation of a pay increase, and so on.
- 6) Interest is a person's proclivity to execute an act, such as a desire to accomplish or study something. If the six characteristics contained in the idea of competence above are thoroughly examined, they encompass four categories of competence that are vital for a teacher: pedagogical competence, personal competence, social competence, and professional competence. The instructor should have complete control over these four sorts of skills. The instructors' awareness of the competences necessitated a high level of accountability on their part. They must have the fortitude to confront the obstacles of the work and the surroundings, which will affect his personality development. This implies that they must also have the bravery to adapt and develop themselves in response to the expectations.

1.7.6. The role of English teacher in the 21st Century

The embodiment of English teachers should be begun with the understanding that English teachers should have certain characteristics as English teachers in 21st century. Some characteristics which expectedly meet the students' needs to create high-quality learning derives. (Churches, 2009, as cited in Antasari, 2013). According to Churches (2009) the characteristic of 21st century teachers are:

- 1) The Adaptor; teachers can adapt the curriculum, and dynamic teaching experience (covering different learning styles). They grasp the concept that 21st century education is not one-size-fits-all. Teacher adapt model of teaching depended on the needs and interest of students.

- 2) The Visionary; teachers must see the potential of the use of tools and web technologies in their class, looks across the disciplines and curricula, relates other fields to reinforce their own teaching and the learning.
- 3) The Collaborator; teachers collaborate with technology tools and with students or fellow teachers in terms of sharing, contributing, adapting and inventing. Brown (2001) highlights teacher collaboration in which teacher learn from each other to develop his / her professional expertise.
- 4) The Risk taker; teachers take risks and sometimes surrender to the students 'knowledge.
- 5) The Learner; teachers become the best of life-long learners; be ready to change and learn as the education changes.
- 6) The Communicator; teachers are fluent in tools and technologies that enable communication and collaboration with students, colleagues, and parents.
- 7) The Model; teacher should be the model to teach moral value to students such as having tolerance, acceptance, global awareness and reflection.
- 8) The Leader; 21st century teachers are leaders since they are a champion of ICT integration process. Then, they set clear goal and objectives to successful learning.

According to Hosnan (2014) saying that entering the 21st century, the profession of teachers must be professional. Professional teachers are not just tools to transmit culture and knowledge, but transform cultural values into science to lead to a more qualified and highly competitive direction. Professional teachers are no longer a source of learning (teacher center), but are facilitators, dynamotors, and catalysts that make students creative (p.25). "Simply put, the professional qualifications of teacher education are described as follows:

- 1) Personal capability, that is, teachers are expected to have knowledge, skills, and skills, as well as a steadier and more adequate attitude so as to be able to manage the learning process effectively.

- 2) Teacher as an innovator, which means to have a commitment to efforts for change and information. Teachers are expected to have knowledge of proficiency, and the right skills and attitudes towards renewal and at the same time spreading ideas of effective renewal.
- 3) Master as a developer, which means he must have a vision of steady and broad and steady perspective. Teachers must be able and willing to look far ahead (the future thinking) in answering the challenges of the times faced by the education sector as a system"

According to Daryanto & Syaiful (2017) The International Society for Technology in Education characteristics of 21st century teacher skills where the information age is the main feature (p. 3-5). Dividing the skills of 21st century teachers into five categories:

- 1) Able to facilitate and inspire the learning and creativity of learners
- 2) Design and develop the learning experience and assessment of the digital age
- 3) To model how to learn and work in the digital age
- 4) Encourage and become a model of responsibility and digital society
- 5) Participate in professional development and leadership.

1.8. Previous studies

Previous research does not refer to the requirements of English teachers' professional development needs in the 21st century. For instance, 21st Century skills and the English foreign language classroom (Yamith, 2013, Suherdi, 2012). In this study explained about What kinds of teachers are needed for 21st century learners? We are moving closer to understanding some of the quality's teachers require. Curious teachers who lead adventurous lives have developed resilience and are creative problem-solvers. The government has granted High Tech High Schools permission to 'grow their own' teachers. Their website advertises for new recruits who also want to transform learning.

Being a professional teacher in the era of industrial revolution (Afrianto, 2018, Norahmi, 2017). In this research explained The Industrial Revolution 4.0 has brought positive influences on the effectiveness and efficiency of resources and production costs in many industries. But it also has an impact on reducing employment, and the emergence of a number of new challenges. In the education sector, in particular, today's educator is obliged to make self-adaptation and certain changes.

Teachers' perception toward social media to improve professional development in English language teaching (Agustrianita, 2017, Chinago, 2015, Boholano, 2017). This research explained the global issues related to modern education in high-tech era insist the teachers improve their skills. The 21st-century teachers are viewed as the agents to make the connection between the global issues and the teaching and learning process inside the classroom. The teachers still need to be open-minded to do self-improvement and to join the training for the 21st century teachers. The improvement of teachers'/lecturers' competencies should be under the focus and budget allocation.

So, English has acquired more credibility and new requirements in its teaching and research, along with new advances in science and technology. Therefore, a new outlook can now be put on English teacher education. As far as Indonesia is concerned, the perspective should be put between the two demands, the high demands of the global world and the value of deep-rooted local identity, in particular religiosity, as the researcher constantly argued.

1.9. Frame of thought

The framework of thinking represents the question of the research: 1) What are the of teachers' competencies in the 21st Century. 2) What are the needs of teachers' competencies of English teachers in the 21st Century. To find out the first research question, the researcher finds out the teachers' competencies in the 21st Century. the researchers find out the indicator's teachers' standard in the 21st Century. To find out the second research question, the researcher investigates how

to find out the needs of teachers' competencies of English teacher in the 21st Century learning at Senior High School. From the two research questions, the researcher tries to convey the research based on the needs in learning English in this current era by interviewing and observing the teachers and the teachers at Senior High School. The framework of thinking of this research is illustrated in the table below:

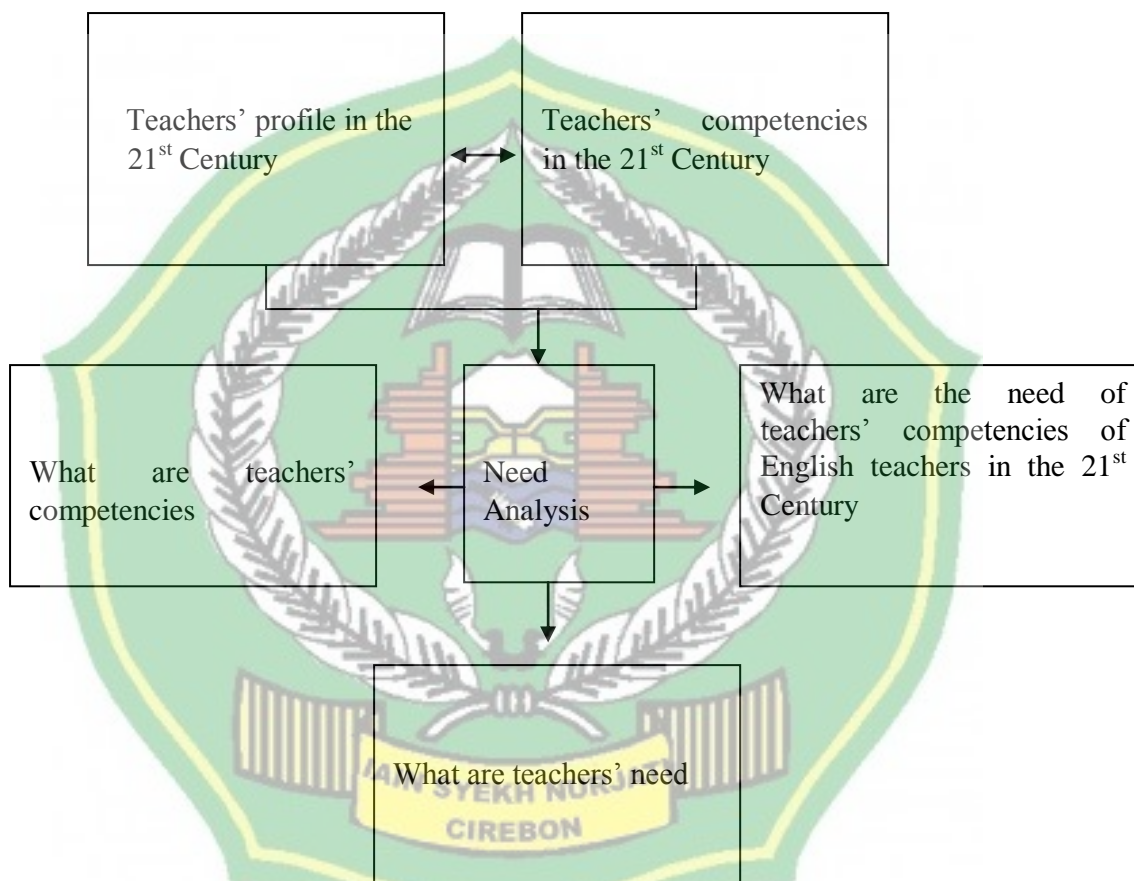


Figure 1.1 Frame of thought

1.10. Research methods

The research methodology is divided into several steps, there are: research design and steps of the research, source and type of data, data collection techniques and instruments, data analysis technique and research timeline.

1.10.1. Research design and steps of the research

In this analysis, the researcher used a qualitative approach. Qualitative research focuses on analyzing social phenomena and providing information on the thoughts and attitudes of the study participants (Lodico, Spaulding, & Voegetle, 2010, p. 142). This research used a case study as the form of design for analysis. Case study research is a kind of qualitative research aimed at identifying meaning, exploring processes and acquiring information through an in-depth understanding of individuals, cultures or communities or situation (Lodico, Spaulding, & Voegetle, 2010, p. 156).

According to Chenail (2011, p. 1721) There are some steps to conducting qualitative approach. *First*, make a draft declaration with sample phrases. *Second*, the researcher has to think about the fascinating intent of the analysis. *Third*, start the research with the following question with the honey subject emphasis. *Fourth*, begin to pose a question or hypothesis about science. *Fifth*, concentrate on the research objective or target. *Sixth*, try to study literature, find some academic theory. *Seventh*, to ensure that the research issue or theory is answered, establish a research design. *Eighth*, build yourself to learn the research skills that we need. *Ninth*, increase the detail of the analysis of the program, be cautious with the address of others. *Tenth*, submit studies. The methods of this research will follow the steps conduct the research by Lodico, Spaulding, Voegtler (2006). Nashrudin and Mustaqimah (2002). There are several stages in this study.

1.10.1.1. Identifying a Research Topic or Focus

The method starts by defining the research subject, narrowing it down by sharpening its emphasis, followed by the issue of formulation research (Efron & Ravid, 2019, p. 38) for a literature review to be conducted.

1.10.1.2. Conducting Review of Literature

Researchers extensively study the relevant literature to gain further understanding and insight into the issue and to assess what research might already have been performed. For aid in locating and formulating a researchable problem, the starting researcher probably turns to the literature.

1.10.1.3. Selecting Participants

A research question will be used by the researcher to assess the participants. Selected teachers as a participant,

1.10.1.4. Writing Foreshadowed Questions

This question is used to extract knowledge about backups from the area. To get adequate details, the researcher will prepare these questions. Such questions will also assist researchers to concentrate on the subject under review.

1.10.1.5. Collecting the Data

The next step requires the execution of the research plan. Qualitative researchers often have a toolbox of data collection methods, including in-depth questioning, including timeline, observation of participants, and review of records. Interviews will be performed simultaneously.

1.10.1.6 Analyzing the Data

It is important to evaluate the data gathered during study. Generally, qualitative data takes the form of a term (descriptions, observations, impressions, recordings, and the like). In order to be represented and interpreted, the researcher must organize and categorize or code the great mass of data.

1.10.1.7 Interpreting and Disseminating Results

The researcher next attempts to explain the findings in terms of the issue of study. In narrative form, qualitative researchers present their perspectives and explanations. They do not speak of chance, but aim to stress the results' trustworthiness and credibility.

1.10.2 Sources and types of data

The data collect from some literatures and participants. Firstly, the numerous data that taken from some literature includes: books, journals, articles related to the analysis of teachers' professional development of English teachers in the 21st Century based on the teachers' need. Secondly, the data will be collected from participants, those are: English teachers at Senior High School at Grade X and XI. The researcher will interview and send a questionnaire to English teachers. Here the researcher just brings a few English teachers to do an interview. Thus, there will be getting a data from the participant to construct this research in the form of interview. used in the theoretical foundation (Nashruddin & Mustaqimah, 2020, p. 85).

1.10.3 Data collection technique and instrument

The data collection technique used the critical literature review theory, which indicated that selecting a journal takes into account numerous technical factors, such as indexing status, impact factor score (journal or author), and journal activity (Nashrudin and Mustaqimah, 2020). Suiter, & Sarli, 2019, 462) (as cited in Suiter, & Sarli, 2019, p. 462). The journal's indexing status serves as a benchmark for assessing its content. In other words, a journal that is indexed by a national or international index system must go through a screening process in order to be included in credible bibliographic databases.

This study applied the above-mentioned theory, which is the data analysis technique, by conducting a critical literature review with many parameters in mind, as well as checking to see if the journal is indexed by national journals such as SCOPUS, and Google Scholar. The impact factor score

is determined by the number of citations in that journal, and the journal operation is determined by the type of Digital Object Identifier assigned to articles or an International Standard Serial Number (ISSN) assigned to the journal. The process of critical literature review can be as follow (Jesson, Matheson, Lacey, 2011, p. 20):

- 1) Formulate draft research question.
- 2) Search, scan, for information, using key words.
- 3) Skim, scan, read, reflect and search some more, defining key concepts.
- 4) Obtain articles and read some more.
- 5) Reassess your question.
- 6) Formulate the final research question for analysis.

A significant technique of data collection involving verbal contact between the researcher and the subject is the interview. In survey designs, and in exploratory and descriptive research, interviews are widely used. There are a number of interview methods, from fully unstructured, in which the person is able to speak openly about whatever they want, to highly structured in which the subject responses are limited to answering direct questions (Mathers, N. Fox, N. J & Hunt, A, 2000, p. 1).

The reason the researcher chose the interview is because the interview technique is very practical to use, because this technique has benefits for both the researcher and the subject, among others; get the right information, the subject prefers to be interviewed rather than writing answers, can know directly the subject's reaction to the questions raised, the researcher can also observe whether the subject understands or not from the questions raised, the researcher can get further and more in-depth information (Rosaliza, M, 2015, p. 78).

In a survey or public opinion poll, an open-ended question (sometimes called an open question) is a question in which alternative responses are not

proposed, and the respondent responds in his or her own terms. Such questions allow for a spontaneous reaction (Popping, R, 2015, p. 2).

Open-ended questions provide an incentive for respondents to provide a wide variety of responses. Since some of these responses are unexpected, follow-up questions are recommended in person-to-person interviews (Hyman, M. R & Sierra, J. J, 2016, p. 3). The stages of Interview process are:

- 1) The interviewer should be active and responsive, not just silent and passive
- 2) Each actor in the interview is a subject for work interaction, an activity aimed at producing interview data.
- 3) More open-ended questions, minimal interruptions, and encourages elaboration of the respondent's experience.
- 4) Encouraging elaboration, the interviewer usually uses narrative tools such as "Continue," "Then what happened? The interviewer encourages the emergence of a story not just a short answer.
- 5) Reconceptualize the research interview to further encourage respondents to tell their own stories (Bastian, I. Winardi, R. D & Fatmawati, D, 2018, p. 6).

1.10.4 Data analysis techniques

This is a qualitative analysis employing literature review. The steps of doing the review are as follow (Efron & Ravid, 2019, p. 6 as cited in Nashruddin & Mustaqimah, p. 5):

- 1) Choosing a review topic and formulating a research question

The method starts by defining the research subject, narrowing it down by sharpening its emphasis, followed by the issue of formulation research (Efron & Ravid, 2019, p. 38 as cited in Nashruddin & Mustaqimah, p. 5) to conduct a literature review. Three points of interest were categorized, *Personal interest* may emerge from everyday life, *Practical interests* may arise from issues of policy, programmatic changes, opportunities, or problems encountered in practice, *Intellectual interests* motivated by a desire to understand in depth the theoretical perspective (Efron & Ravid, 2019, p. 40 as

cited in Nashruddin & Mustaqimah, p. 5). In this article, the topic of the research is understanding critical review, focusing on opening possibilities of integrating different fields into ELT research.

2) Locating and organizing research sources

There may be rich sources or literature (books, journals, documents, conferences, papers) either found in electronic databases or libraries with the accuracy and trustworthiness of the knowledge discovered online (Efron & Ravid, 2019, p. 59 as cited in Nashruddin & Mustaqimah, p. 5). The need for having keywords are considerable for choosing and finding literature related to topic interest and research question. Most importantly, a research question may help the researcher to decide a keyword. Deciding keywords for searching related sources is possibly use the systematic list of a synonym (thesaurus) (Efron & Ravid, 2019, p. 63 as cited in Nashruddin & Mustaqimah, p. 5). In this article, the main key words are critical literature review, *EFL learning research*, and *interdisciplinary study*.

3) Selecting, analyzing, and keeping notes of sources

The literature analysis method involves the reader and the researcher to organize a list of reviews for reading. This ensures that only relevant knowledge is extracted from the chosen sources to create your own original literature review (Blumberg, Cooper & Schindler, 2008 as cited in Efron & Ravid, 2019, p. 74). Creating criteria for literature selection may useful for the discussion issue targeted specific review. In this study, the inclusion and exclusion criteria are not explicitly demonstrated (Efron & Ravid, 2019, p. 63 as cited in Nashruddin & Mustaqimah, p. 5).

4) Evaluating research articles

When some initial steps of the literature review have been taken by the researchers, the literature that has been addressed to your research field is critically evaluated. It is important to write a literature review to take a critical position towards the sources examined and recognized their limitations, as well as their strengths (Efron & Ravid, 2019, p. 63 as cited in Nashruddin & Mustaqimah, p. 5). In addition, critical literature review may involve critically

evaluate the title, abstract, introduction, literature review and research question (Efron & Ravid, 2019, p. 63 as cited in Nashruddin & Mustaqimah, p. 5). In this current study, all possible resources are examined with the limit to find an example of critical literature review that can be replicated.

5) Structuring and organizing the literature review

The researcher needs to use the strategy of the synthesis matrix in this process. This method requires an iterative process in which the researcher discusses their study of individual sources and groups them together in a grid to define literature themes and topics (Whittemore & knafl, 2005 as cited in Efron & Ravid, 2019, p. 123). In this article, the structures are as in the finding and discussion section (Nashruddin & Mustaqimah, p. 5).

6) Developing arguments and supporting claims

"The argument should not just echo the thoughts of authors whose writings you have reviewed, but rather advance or expand what is known and present it from your own unique perspective" (Efron & Ravid, 2019, p. 156 as cited in Nashruddin & Mustaqimah, p. 5). However, the researcher's idea or argument is less credible if no supporting evidence or claims from theorists, scholars, policy, etc. The quality of evidence requires some critical points, accurate, precise, authoritative, representative, current and relevant (Booth, 2008, Machi & McEvoy, 2012 as cited in Efron & Ravid, 2019, p. 160). In this article, the arguments are built inherent in the finding and discussion section (Nashruddin & Mustaqimah, p. 5).

7) Synthesizing and interpreting the literature

Synthesizing requires the process of unifying the separate elements of each analysis into logical points to create a consistent case, theory, and conclusion (Pope, 2017 as cited in Efron & Ravid, 2019, p. 177). This step can be started by grouping the sources, comparing, and contrasting sources (Efron & Ravid, 2019, p. 160 as cited in Nashruddin & Mustaqimah, p. 5) based on related research area and purpose. In this study, the process is not shown for the limit of the research article (Nashruddin & Mustaqimah, p. 5).

8) *Putting it all together*

The development of a successful and thorough literature review should be critically involved in these processes. The last but not least in this analysis is that all arguments are rolled up and rechecked through the text for accuracy (Nashruddin & Mustaqimah, p. 5). The method of gathering qualitative data needs to be displayed. For both researchers and others, the show will be very useful. Display is a publication that describes the item under analysis. Furthermore, the process of data reduction is intended to filter, pick and sort the necessary data, organize it in a fair and logical order and relate it to relevant aspects. The result is a conclusion about the object under study. In complete, qualitative data processing activities include the stages: a) data reduction, b) data display, c) data analysis, d) concluding and verification, e) increasing the validity of the data, and f) provide narrative analysis results. (Suradika, 2020, p. 27).

1.10.5 Research timeline

OUTLINE OF THE TIMING FOR VARIOUS STAGES OF RESEARCH:
the researcher allocated in 3 months to complete the data collection

| | Activities | Month | | | | | | | | | | | | | | |
|---|---|---------|---|---|---|---|----------|---|---|---|----------|---|---|---|---|--|
| | | October | | | | | November | | | | December | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | |
| 1 | Preparing research proposal | | | | | | | | | | | | | | | |
| 2 | Instrumental development of research proposal | | | | | | | | | | | | | | | |
| 3 | Instrumental try out of research proposal | | | | | | | | | | | | | | | |
| 4 | Revision of research proposal | | | | | | | | | | | | | | | |

