THE INFLUENCE OF ICT INTEGRATION PRACTICES ON STUDENTS' MOTIVATION IN ENGLISH LANGUAGE TEACHING IN YOGYAKARTA CITY

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ABSTRACT

MUKOROBIN, R. *The Influence of ICT Integration Practices on Students' Motivation in English Language Teaching in Yogyakarta City*. **Thesis. Yogyakarta: Graduate School, Yogyakarta State University, 2018.**

This research was aimed of examining: (1) the influence of teachers' ICT integration practices on students' motivation; and (2) the differences on ICT integration practice and students' motivation by demographic-related variables.

This was a correlational study. The subjects of the study were 314 senior high school students and 12 teachers from six public schools in Yogyakarta city. There were two kind of questionnaires as the instrument of the study. The first was the students' motivation questionnaire to measure students' motivation on the integration of ICT that was adapted from Passey, Rogers, Machell, and McHugh (2004). The second was the teachers' ICT integration practice questionnaire to know the general practice of ICT integration by the teachers during teaching and learning process that was adapted from Braak, Tondeur, and Valcke (2004). The data were analyzed using Pearson product-moment analysis, regression analysis, *t*-test, and ANOVA.

The findings showed: (1) there was a significant influence of ICT integration practices on students' motivation; (2) teachers' ICT integration differed significantly by their gender and teaching experience, while students' motivation differed significantly by their gender and parent education.

Keywords: *students' motivation, ICT integration, English language teaching*

ABSTRAK

MUKOROBIN R. *Pengaruh Praktik Integrasi ICT terhadap Motivasi Belajar Siswa pada Pengajaran Bahasa Inggris di Kota Yogyakarta.* **Tesis. Program Pascasarjana, Universitas Negeri Yogyakarta, 2018.**

Penelitian ini bertujuan untuk mengetahui pengaruh: (1) praktik pengintegrasian ICT oleh guru terhadap motivasi belajar siswa; and (2) perbedaan pada praktik integrasi ICT dan motivasi siswa berdasarkan variabel demografik.

Penelitian ini merupakan penelitian korelasi. Responden dari penelitian ini yaitu 314 siswa sekolah menengah atas (SMA) dan 12 guru dari enam sekolah negeri di kota Yogyakarta. Terdapat dua macam angket yang digunakan sebagai instrumen dalam penelitian ini. Pertama yaitu angket motivasi belajar siswa yang digunakan untuk mengukur motivasi belajar mereka terhadap pengintegrasian ICT oleh guru yang diadopsi dari Passey, Rogers, Machell, and McHugh (2004). Kedua adalah angket integrasi ICT oleh guru yang digunakan untuk melihat praktek pengintegrasian ICT secara umum dalam proses pengajaran yang diadaptasi dari Braak, Tondeur, and Valcke (2004). Analisis data dilakukan dengan menggunakan analisis *Pearson product-moment*, analysis regresi uji *t*, dan ANOVA.

Hasil analisis menunjukan bahwa: (1) terdapat pengaruh antara praktik pengintegrasian ICT terhadap motivasi belajar siswa; (2) praktik integrasi ICT oleh guru berbeda secara signifikan berdasarkan jenis kelamin dan lama mengajar, sedangkan motivasi belajar siswa berbeda secara significant berdasarkan jenis kelamin dan pendidikan orang tua.

Kata kunci: motivasi belajar siswa, pengintegrasian ICT, pengajaran Bahasa Inggris

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THE INFLUENCE OF ICT INTEGRATION PRACTICE ON STUDENTS' MOTIVATION IN ENGLISH LANGUAGE TEACHING IN YOGYAKARTA CITY

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The Researcher,

Royana Mukorobin

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CHAPTER I

INTRODUCTION

A. Background to the study

The notion of information, communication, and technology (ICT) and its tools are not a new label for modern people nowadays since they use those tools every day. Further, the presence of a number of ICT tools with its applications permits individuals to create their communication intensively. The immersion of the internet, smartphones' application and social media networking allows people to be more socially connected through virtual space instead of physical space publicly (Abdel-Aziz, Abdel-Salam, & El-Sayad, 2016). The application such as e-mail, messengers, and other social media application facilitates them in communication practice with people who live far away. Taking an example of Skype that allows people to perform face-to-face virtual reality communication. Moreover, it offers a communication chance without constraints of time and place (Talebiana, Mohammadia, & Rezvanfar, 2014) All in all, technology seems unavoidable as it is a part of today's digital era.

Regarding the implementation of ICT in Indonesia, a clear statement is already stated in the ministry decree year 2015 number 45 by the Ministry of Education and Culture in the implementation of curriculum 2013 (Lubis, 2018). The content is interpreted in the following statement; (1) the students' hard and soft skills should be equalized in the curriculum; (2) the instructional method such as project, discovery, and problem-based learning should be included as a part of

scientific approach foundation by realizing the crucial role of ICT; (3) the information technological knowledge should be combined in all of the school subjects that covers English as a learning media instead of separate subject (Ministry of Education and Culture, 2014).

In education, the technology involves the disciplined application of knowledge for the purpose of improving learning, instruction, and/or performance (Spector, 2016). The employment of authentic materials as the learning sources leads the learning activity to the real-life learning (Ahmadi, 2018) and also accepted as a valuable medium to motivate the students in learning (Wekke & Hamid, 2013). As a result, the students' performance improves as they use less threatening means to communicate and share their thought (Young, 2003). The technological tools such as a computer, LCD, DVD, interactive whiteboards, television, pictures, games, and other tools contribute to the possible access to it. Accordingly, the presence of technology in the classroom also accommodates students with different learning styles (Naimie, Siraj, Abuzaid, & Shagholi, 2010) by adding a concrete example or demonstration of the concepts taught in the classroom. The use of sounds, visual effects, pictures, graphics, and other tools might assist the students to be well-progressed in learning. Further, Valk, Rashid, and Elder (2010) assert that ICT allows the students and the teachers to be more communicative and interactive, it also enables to transform teaching and learning activities into student-centered form.

In addition, to support the development of technology, Yogyakarta city already developed as a cyber city alongside Makasar, Pangkal Pinang, Malang,

Sukabumi, Bandung, Yogyakarta, Denpasar, and Solo (Elly, 2008). Moreover, Yogyakarta that is known as a city of scholar has been transformed as a cyber city and became active internet users with an active internet connection facility since 2009 (News Desk, 2017). Yet, the transformation was started in 2003 (Ayuna, 2017). As a result, Yogyakarta government and Telkom Company build cooperation to set up Yogyakarta as a cyber-city (Pratama, 2013). This collaboration offers adequate internet access in several strategic place/points in Yogyakarta city. Accordingly, the development of technology in Yogyakarta leads this city to the community-based technology that creates cyber village (kampung cyber) in several places such as Patehan, Kraton, Suryatmajan, Tegal Panggung and others (Rachmawati, 2014). In brief, it is expected that the development of Yogyakarta as a cyber-city leads the people to become familiar with technology and incorporate it in the teaching and learning process.

Regarding the implementation of technology in Yogyakarta city, it has achieved the top score of national examination in the academic year 2016/2017, particularly English subject in secondary level (Department of Education Youth and Sport, 2017). This achievement leads to the ideas that the secondary students have good motivation in learning the language. Studies report that students' motivation might difference based on their gender and parent education (BECTA, 2008; Palmen, 2011; Farooq, Chaudhry, Shafiq, & Berhanu, 2011; Usher & Kober, 2012). Palmen (2011) reports that there is a difference between boys and girls students' motivation in ICT integration and use. This finding also is supported by BECTA (2008) that the difference does exist between boys and girls motivation in the use

of ICT. In addition, motivation is probably different based on their parents' education. Farooq and Berhanu (2011) assert the difference in the students' motivation based on parents' education do exist as educated parents engage more on the children.

In the classroom instruction, the teachers play as the key role (Ghavifekr & Rosdy, 2015). The way they deliver the course in their classroom becomes crucial as in this point the students learn from them, which directly or indirectly influence their motivation. Indeed, teachers' attitude in the technological application also matters (Schiller, 2003). However, there are several things might contribute to the teachers' consideration in applying ICT in their classroom and some of them are their gender difference and teaching experience (Mumtaz, 2006) and age (Braak, Tondeur, & Valcke, 2004). Further, Teo (2008) reports that the teacher with many years of teaching experience found to be less confident with using the computer as they were not experiencing computer education at their college. On the other hand, Braak, Tondeur, and Valcke (2014) argues that there is a difference between the male and female teacher in the ICT use as male integrates ICT more often than females.

Conversely, Indonesia ELT context has several complex issues such as lack of professional development (Mutohar, 2012), teaching approach and passive classroom contribution (Hidayati, 2016), and limited access to the ICT (Muslem, Yusuf, & Julian, 2018). Conventional teacher-centered is the typical characteristic of Indonesian English language teaching which is not demanded the students to be actively involved in the classroom learning activities (Hidayati, 2016). Therefore,

the integration of ICT in English language teaching opens bigger chance to change and improve the effectiveness Indonesian ELT condition Hidayati (2016). Further, Hidayati (2016) adds that ICT in teaching and learning process is a potential thing to support Indonesian ELT context with the aforementioned problems.

The implementation of technology in Yogyakarta city reflected the familiar use of it in daily activity as well as classroom instruction. Therefore, this study attempts to examine: (1) the influence of ICT integration practices on the students' motivation; and (2) the significant difference in ICT integration practice and the students' motivation by demographic variables.

B. Identification of the Problems

A number of problems appear regarding the integration of ICT in English language teaching. In this case, the researcher identified problems as follows. Yogyakarta city is in the highest rank of a national examination score, particularly in English subject (Department of Education Youth and Sport, 2017). Based on this result, it is expected that the city employs good teaching practice in the classroom by utilizing technology in teaching and learning.

However, a study reports that teacher's knowledge on the information concern of the technological practice, such as how to make a full use of technology is limited (Muslem, Yusuf, & Juliana, 2018). It happens because they are busy with other business (other than teaching) that hinder them to learn about ICT related things. This obstacle influences the teachers' confidence as they are afraid of inaccuracy or raises other technical difficulties during the employment of technology (Mollaei & Riasati, 2013). Further, Baek, Jung, and Kim (2008) report

that experienced teachers less ready to integrate ICT in their teaching, while teachers with little experience are more likely to integrate it. Recent studies have revealed that a negative standpoint towards technology integration also contributes to the list problem of ICT integration. Hismanoglu (2012), Brown (2014), Noordin, Babashamsi, and Shakib (2013) reveal that teachers who do not know the primary function of technology and never employ technology in their classroom tend to pose negative outlook towards ICT. This fact will probably impede the success of technology integration in the classroom.

The support from government and school policy regarding technology (Drent & Meelissen, 2008) contribute to another problem with ICT integration. Limited technological facilities might hinder the integration of technology in the classroom as the ICT integration in Indonesia is still low (The Southeast Asian Ministers of Education Organization, 2010). The distribution of ICT software and hardware is still limited that prevent the use of ICT in Indonesia's schools (Herendita, 2013). Further, time allocation and technical problem rise another constraint on the integration (Lubis, 2018).

Besides, it is obvious that most of the students probably lack motivation in learning English as conventional teaching is applied in every lesson (Dişlen, 2013). Moreover, motivation is one of the most important factors in acquiring a foreign language (Ariane & Pascale, 2012), therefore, students' motivation becomes a crucial aspect to attain satisfactory result in learning.

C. Delimitation of the Problem

Based on the problems that have been identified, the researcher focuses the problem on the influence of ICT integration practices on the students' motivation and find out the significant difference in ICT integration practice and students' motivation by demographic variables.

D. Formulation of the problem

Dealing with the problem limitation above, this investigation attempts to answer the following questions.

1. Is there any significant influence of ICT integration practice on the students' motivation?
2. Are there any significant differences on ICT integration practice and students' motivation based on demographic variables?

E. Objectives of the Study

The objectives of the research are formulated as follows.

1. To examine the influence of ICT integration practice on the students' motivation.
2. To find out significant differences in ICT integration practice and students' motivation based on demographic variables.

F. Significances of the Study

This research presents two crucial points on the ICT integration in English language teaching theoretically as well as practically.

1. Theoretical

Theories do confirm that the integration of ICT in English language teaching and learning is crucial (Hassanzadeh, Gholami, Allahyar, & Noordin, 2012) and inevitable (Mutohar, 2012). It can improve peer cooperation, improve students' motivation, transform teaching instruction to be more student-centered and improve higher-order-thinking as well as problem-solving skill (Hassanzadeh, Gholami, Allahyar, & Noordin, 2012). More, Hassanzadeh, Gholami, Allahyar, and Noordin (2012) add that ICT offers a different way of learning by promoting collaborative learning, improving communication skill, increasing teachers and students' motivation through diverse activities and advanced as well as updated information. The aforementioned benefits offered by the integration of ICT in the instructional process enable to assist the learning process through the internet also multimedia applications (Henao, 2017).

2. Practical

By examining the practice of ICT integration in ELT on the students' motivation, the finding might support the education stakeholders in taking a careful decision of the technological integration. The government might consider the finding of this study to revise as well as create an adequate policy to support the intended students' attainment on the integration of ICT. Likewise, the school's support of the technological facilities available in the classroom is inevitably crucial. Finally, the teachers can be carefully considered it as an important mean to be manifested through their positive attitude on the ICT integration.

CHAPTER II

LITERATURE REVIEW

A. Theoretical Review

This theoretical review includes a number of theories on ICT integration, teacher competence, and the students' motivation. The detail explanation as follows.

1. Information Communication and Technology (ICT)

In this section, the researcher elaborates several important points regarding ICT. Those involve ICT definition, the ICT integration term, the importance of ICT in the classroom, the challenges of ICT integration, the benefits of ICT integration, the ICT in ELT, and the ICT and motivation.

a. The ICT Definition

The ICT is the abbreviation for information communication and technology. The word "communication" has two different meanings namely singular and plural forms. The singular concerns to people communication and the plural form refers to the overall field of the data communication infrastructure (Lloyd, 2005). Further, Lloyd (2005) adds that in general, ICT is associated with technologies to assess, collect, control, and share the information. It covers hardware (computers and other devices), software application, and connectivity (internet access, video conferencing, personal digital assistants along with others). Lloyd (2005) argues that the most significant about ICT is the expanding convergence of computer-based, multimedia and communications technologies and the quick speed of

change in technology and its use. To sum up, ICT is not only covered a certain tool, but also the use of communication technologies. Further, the other possibility of access to ICT might assist ELT development better, since it allows both teachers and students to access authentic materials to support real-life learning (Ahmadi, 2018).

Hoque and Alam (2010) outline ICT as a various set of technological tools that can be utilized to do communication, creation, dissemination, keeping, and management of information. More specifically, Padhy (2014) inserts that information and communication technology refers to the wide range of devices that cover both electronic and computerized devices, and associated human interactive materials that enable them to utilize those devices for teaching and learning purposes other than personal use only. In brief, ICT is a kind of technological tools to communicate, create, and manage information that facilitates the users in teaching and learning process. The tools might include the computer, television, projector, camcorders, digital camera, e-mail, scanner, mp3 player, game, desktop, hard-disk driver, internet, tablets, modem, e-book reader, laptop, and such (Padhy, 2014).

Above all, ICT includes hardware, software application, and connection. It also covers all of the things to restore, gather, manipulate, access the information which enables the students to learn in a different way and leads them to develop their skills better through the advanced multimedia application offered. However, the teacher's assistance is equally

important to report students' learning progress. By doing so, the students are on the right path of learning.

b. The ICT Integration Term

Several terms of ICT integrations have been highlighted by a number of scholars. Capuk (2015) states that ICT integration enables the students and teachers construct and co-construct new knowledge and meaning within activities in the classroom. It also refers to the employment of computer-based communication that incorporates into the classroom instructional process daily (Ghavifekr & Rosdy, 2015). More, Ghavifekr and Rosdy (2015) add that the teacher plays as a key role as a controller in the application of ICT in the classroom as the integration of ICT in education refers to technology-based learning process application (Ghavifekr & Rosdy, 2015). Furthermore, Earle (2002) links the concept of wholeness to ICT integration that gathers all of the connected element systems as a whole. Demonstrating this, the teachers cannot use technology only in the instructional process without considering the content and pedagogy insertion which are categorized as crucial elements in teaching and learning (Earle, 2002). Similarly, Williams (2003) defines ICT integration as the assistance of ICT tools (e.g. Computers, Internet, CD ROMs, and so on) in teaching and learning.

The ICT integration also means the ways in which technology is utilized (Fiktorius, 2013) as a mediated tool in the teaching and learning activities to gain certain goal (The Southeast Asian Ministers of Education

Organization, 2010). It covers the assistance of technological use for the students to collect, communicate, and exchange information with peers and others in educational purposes (Anderson, 2010). In this study, ICT integration defines as the use of ICT tools within the language teaching and learning instruction to achieve particular learning goals.

c. The Importance of ICT in the Classroom

Webber (2003) states that the use of ICT in the classroom is more practical, innovative, and interactive rather than theoretical. Further, Webber (2003) adds that it assists new way of teaching and learning and helps the students develop either knowledge or skill for cooperation, communication and problem-solving. It also enables them to be an independent and autonomous learner. The Independent and autonomous character also allow the students to be responsible for their own learning and keep learning even outside the classroom (Andriani, Padmadewi, & Budasi, 2018; Smith, Kuchah, & Lamb, 2018). Autonomous students are expected to be able to control their learning board, cognitive process, and learning content (Tran & Duong, 2018). Other than that, the students should be aware that they do not only need to be responsible for their own learning, but also implement their own decision (Benson, 2007). Moreover, Tedla (2012) asserts that ICT makes teaching and learning easier. More, the professional development in this area is highlighted to support the successful use of it.

In relation to this, the existing research by Meenakshi (2013) lists several aims and objectives of the ICT implementation. They include: 1) to

implement the principle of life-long learning/education; 2) to increase a variety of educational services through medium/method; 3) to promote equal opportunities to obtain education and information; 4) to develop a system of storing and distributing educational information; 5) to promote technology literacy of all citizens, especially for students; 6) to develop distance education with national contents; and 7) to promote cultural learning at school (development of learning skills, expansion of optional education, open sources of education, and such).

Furthermore, Meenakshi (2013) adds that ICT can enhance the quality of education by increasing students' motivation and engagement, facilitating the acquisition of basic skills, and enhancing teacher training. ICT is also a transformational tool if it used properly. It can change the teacher-center to be more student-center learning (Riasati, Allahyar, & Tan, 2012; Mutohar, 2012). The employment of its tools such as video, multimedia computer software that enable text, colorful moving picture, and sound in them provide interesting authentic learning content to engage students in the learning process (Ahmadi, 2018). Hence, the learning activity will be more meaningful and remarkable.

In the use of ICT in the classroom, Braak, Tondeur, and Valcke (2004) categorize two general use of ICT namely supportive computer use and class use. The first term refers to the use of ICT for administrative task like students' administration, evaluation, worksheet preparation, and track the students' learning progress. The second term, however, focus on the use

of computer to support and enhance the teaching and learning process (i.e. demonstration, drilling practice, instruction and differentiation). Those patterns of ICT use, supportive computer use and class use, become the basis of questionnaire development.

Ghavifekr and Rosdy (2015) emphasize that the issue ICT integration in the school particularly in the classroom instruction is crucial. The utilization of ICT in the classroom assists the students to learn better within the technology-based atmosphere as they are familiar with the use of technology in this digital era (Ghavifekr & Rosdy, 2015). Further, the main reason is that technological employment in education contributes a number of pedagogical benefits that lead to the effective support in learning with the support from ICT elements as well as its components (Jamieson-Proctor, et al., 2013). Moreover, the employment of ICT in English language teaching and learning enables to stimulate the students to be more eager and interested in learning (Mafuraga & Moremi, 2017). The use of ICT also facilitates students' learning effectively i.e. the students can learn new words, what they mean, and the way they pronounced (Mafuraga & Moremi, 2017). By this case, ICT integration is thought as the important thing to be considered in the classroom instruction.

To sum up, ICT in the classroom is crucial as it can support classroom learning instruction in several conditions, such as 1) assists new way of teaching and learning; 2) helps the students develop either knowledge or skill for cooperation, communication and problem-solving;

3) enables the students to be an independent and autonomous learner; 4) enhances better quality of learning; and 5) stimulate the students to be more eager and interested in learning.

d. The Challenges of ICT Integration

Despite the important use of ICT in the classroom, several scholars also mention the unavoidable challenge of ICT integration. Tedla (2012) mentions some difficulties that are the most noticeable, namely students become off task, unrealistic ICT policies, old instructional practice, inadequate infrastructure and facilities, low community participation and involvement, negative teacher beliefs, lack of pre-and in-service training, inequitable ICT distribution, lack of school base management, less partnership among schools, lack of incentive and support, and overloaded teaching tasks.

In line with this, Jones (2004) asserts more and less the same challenges as mentioned by Tedla above. Jones (2004) reports the challenges face by the teacher in integrating ICT are based on several factors namely: 1) teachers are lack of confidence and anxiety; 2) teachers are lack of competence due to time limitations, pedagogical training, skills training, and focus in personalizing teacher training; 3) teachers are lack of access to resources of hardware as they have poor resources organization, quality hardware, and inappropriate software; 5) teachers are afraid of the technical problems of things going wrong; 6) teachers are resistant to change and

negative attitude; 7) impact of public examinations; 8) age differences; and 9) gender differences.

Furthermore, Schiller (2003) reveals that teachers' challenges toward ICT integration involve personal characteristics such as educational level, age, gender, educational experience, experience using technology in education purpose, and attitude toward technology. In addition, personal characteristics influence the teachers' decision the most in using technology or not. Those challenges mentioned by Schiller (2003) has the same characteristic as what has been mentioned by Jones (2004) previously. Indeed, those challenges contribute to the success of ICT integration practice in language teaching and learning.

In short, the challenges mentioned above probably could hinder the teachers to employ ICT in the classroom. In fact, teachers' internal factor like their attitude on technology, and their own fear dominate the barrier. Finally, it is somehow problematic for the teachers to integrate ICT in their classroom if the support from the government as well as the school is still limited.

e. The Benefits of ICT Integration

The integration of ICT in the classroom provides a different atmosphere of learning environment which also offers a number of benefits. Ghavifekr and Rosdy (2015) add that ICT integration can improve the standard, accessibility, and cost-efficiency of the teacher instructional delivery. It is obvious that the presence of ICT helps both teacher and

students in learning the language effectively. The employment of ICT tools creates a different learning situation which enables students to be more interested to learn the language. Similarly, Rabah (2015) asserts that technology has a flexible and powerful characteristic which might support learning, it also supports to face globalization challenges, and motivates the students to perform better.

Riasati, Allahyar, and Tan (2012) reveal several benefits of ICT in learning that discussed in the following section.

1) Engagement

It reports the improvement of the students' engagement in finishing the task as the teacher utilizes ICT in the classroom. This engagement also can increase students' motivation as fun as playing a game. This fun feeling is a key to learn foreign language as it can encourage them in learning.

2) Academic ability improvement

The students' academic ability might also be improved by the change in their attitude and perhaps enhance self-confidence. This confident helps the students to accomplish a better academic skill.

3) Teaching and learning paradigm shift

Teaching and learning paradigm shifted from teacher-center to students-center unconsciously support effective learning. It is because the students can explore their selves by finding out more learning sources which can support them to be independent learners. Moreover,

the presence of technology in the classroom gives another benefit to the students which can assist them to perform better through ICT tools utilization.

4) An assessment moves

Participating in the assessment might improve the students' awareness on learning and performance. Recently, teachers involve students in an assessment group to shape their collaborative learning skill excellently.

5) Collaborative learning engagement

The presence of technology supports students' interaction with the world. They can communicate with whomever they want to communicate with since technology supports them to do so. Moreover, the access to unlimited sources and exchange communication as well as information with peers from other schools enables them to a wider community access. In brief, students are able to be engaged in a real-life communication practice.

6) Lowering learning anxiety level

Communication exchange with peers or another person in the society might decrease students' anxiety. It happens because community offers a difference environment compare to classroom which can improve their language skills and rise autonomy.

Furthermore, Kumar (2016) mention some advantages of adopting ICT in distance education sector. Those include: 1) facilitating easier course

delivery; 2) improving and increasing access; 3) enhancing pedagogical and course design skills; 4) improving collaboration and interaction, 5) preparing teaching and learning materials; 6) providing library and information service, and supporting online evaluation. In short, ICT support distance education since the face-to-face interaction among teacher and students are quite limited, hence the presence of technology could become a solution to facilitates possible distance interaction.

All in all, the presence of ICT might facilitate learning better in several ways. First, it equips students' skill development for the future career. Second, it promotes flexible access to the learning materials and promotes independent learners. The subsequence is teachers' professional development, in this case teaching development. Last but not least is promoting instructional movement from traditional to the more advance interaction without ignoring traditional teaching method. Likewise, through technology which enables authentic learning, the students experience a different phenomenon that is impossible to explore with the conventional method (Mukhari, 2016). Therefore, the teacher should be able to combine the conventional teaching method with ICT to accommodate students' new generation (Levinsen, 2011).

f. The ICT in ELT

English has been associated with the ascendancy of industrial and technological development (Kenning, 2007). Further, Kenning (2007) continues that technology is likely to acquire its own virtue of lingua Franca

status, which finally endures being correlated with high prestige media such as satellite and television. This fact illustrates that technological advances are liable to affect the apprehension of language learning.

The use of ICT in the classroom provides a great change of motivational activities for the students, stimulates students in creative learning and more opportunities for student-teacher interaction (Samuel & Pulizala, 2014). In this type of learning, the class goes akin to a conventional classroom, yet offer a bigger change to employ real-life learning. Further, the learning activities occupy the use of various ICT tools either in the classroom or when students are given the tasks as homework.

In relation to this, the presence of ICT indeed supports the development of students' language skill (Akhtar, 2016). In receptive skills (listening and reading) students can learn directly through target language sources in the well-equipped lab (Sheir, Eltomy, & Mostafa, 2014) or a video of native talk (Kavitharaj, 2017). The use of the target language could broaden the students' knowledge of the target language and enrich their understanding of another culture as well. Podcast or mp3 recording of American lifestyle or story of snow white and seven dwarfs can be other choices regarding the teaching materials. As Margana (2016) asserts that in teaching receptive skills, the teacher might take the target culture as the input sources. Further, the knowledge of the target culture reinforces the students in understanding the culture better. Conversely, in productive skill, local culture might help students to construct spoken or written text

(Margana, 2016). It means the source of their learning comes from the things around them. By doing so, it enables them to sharpen their productive skill confidently because they are familiar with the topic. In addition, Margana (2016) also emphasizes that the selection of target as well as local culture as learning sources should depend on students' language proficiency. Hence, the selection of appropriate sources needs to be carefully considered to maximally assist the teaching and learning activity. In addition, in the productive skill mastery, the teacher might incorporate online platform by providing online reading and writing environment that could be easily arranged in this digital age (Henao, 2017; Liu & Ko, 2016).

According to Hidayati (2016), the utilization of ICT integration in learning is possible to be maximized when it is considered in a comprehensive learning design. All of the learning tasks and activities might be designed in accordance with the following criteria: a) promoting discussion and sharing ideas; b) emphasizing on process and output of learning objectives; c) utilizing multi-media on learning; d) opening wider access to information; e) recording students' outcomes regularly; f) providing a chance for feedback and assessment; g) learning is flexible every time and everywhere; and explaining whether the task activities can be done with or without IT. Those criteria might become teachers' guidance in designing learning activities by employing ICT integration. By practicing those criteria on their teaching design, it hopes teachers can maximally assist students' learning particularly in learning a foreign language.

Parvin & Salam (2015) note that the insertion of ICT might stimulate teachers and students to work in different ways. It facilitates them in a discussion, evaluation and reflection, investigation, assistance, and opinion. In addition, the probable benefits of ICT integration in language teaching are undeniably pervasive in the large varieties of the tools employed and various purposes associated with utilizing them. In relation to this, Zhao (2003) remarks several points regarding the effective use of technology in language education. These include access to learning materials, communication opportunities, feedback, and students' motivation. The further explanations are as follows.

1. Access to learning materials

ICT work in three way of benefits: a) it enhances efficiency access through multimedia technologies; b) it enables to increased authenticity through video and internet; c) it improves a better comprehensibility through students' control and multimedia observation.

In learning the language, video assists the students to learn with visual and auditory aid that benefits for those who have a visual and auditory learning style. Therefore, the students could learn effectively based on their own style of learning. Furthermore, students could learn various text types as they could easily get access to authentic materials. It facilitates them to know and analyze the original text from the target language (i. e. English) to develop their

respect and awareness of other existing culture. In short, the ICT benefit of the learners not only in easy accessing authentic materials, but also facilitate their various learning styles. In addition, learning the authentic material or original text of target language enables them to develop their cultural awareness better.

2. Opportunities for communication

ICT offers opportunities to communicate in two different ways, namely, interaction with the computer by a particular program such as oral communication recognition and oral communication synthesis program, and interaction with peers by CMC (computer-mediated communication) and teleconferencing technologies. Learning the language through the program, enable the students to have correct pronunciation and develop their fluency effectively. Moreover, the program will give feedback directly to their pronunciation or simply show the correct one. It trains their speaking ability as well because of the program set by the native language. Adding to this, the activity could also be done outside the classroom through teleconferencing. By doing this, students could be more aware of their own responsibility to improve their skill particularly speaking.

3. Feedback

More current application technologies enable more contextualized and pedagogically relevant feedback, including a grammar checker, spell checker, pronunciation corrector through

automatic speech recognition and error tracking by analyzing students' responses stored in the computer. Indeed, the existence of technology is able to give direct feedback to the users and guide them to have correct work as well. It can assist the students to get better learning progress in the four language skills efficiently.

4. Students' motivation

Most of earlier studies (Kreutz & Rhodin, 2016; Klimova & Poulova, 2014; Hjalmarsson, 2015) report positive finding on ICT integration in the teaching instruction. They reveal that the students could be actively participated in learning which might increase their curiosity in learning through ICT. Furthermore, ICT could transform the learning to be more valuable, enjoyable, and practicable by the assistance of various computer programs. Consequently, the students could maximize their learning time and achieve a satisfactory result.

To summarize, the existence of technology in the teaching and learning offers a number of benefits for both student and teacher. Therefore, to accomplish the intended attainment, the teacher and student should work together in maximizing the employment of the existing ICT tools. By doing so, the learning activity will be more valuable.

g. The ICT and Motivation

The indication of ICT as motivational benefits is highlighted on activities and classroom environment that enhance learning goals (Passey, Rogers, Machell, & McHugh, 2004). The integration of ICT in language

teaching and learning has several significant influences on the students such as improving peer cooperation, improving students' motivation, transforming teaching instruction to be more student-centered (Hassanzadeh, Gholami, Allahyar, & Noordin, 2012) and improving the higher-order-thinking (Edumadze, 2015) as well as problem-solving skill. The integration of ICT tools enables to assist the students in acquiring English competency, likewise, improve their learning experience quality (Samuel & Bakar, 2006).

A number of studies demonstrated about ICT in language learning can enhance students' motivation. A study emphasizes that technology application contributes to the students' motivation (Hsu & Wang, 2010). More, Wang and Liao (2011) insert that in acquiring a new language, linguistics factor is not the only factor that influences the acquisition. It also deals with personal factor as well, such as motivation and students' personality. Moreover, the teacher might adapt and personalize education to improve motivation and participation, at least the students become more responsible for their own learning and ensure better learning quality (Mullamaa, 2010). All in all, teachers' role in the language classroom is not only assisting the students to pose high achievement, but also motivating them to learn with consistency. This character might assist the students to not only concern about the learning result, but also appreciate more to the process that will strengthen their learning enthusiasm.

Passey, Rogers, Machell, and McHugh (2004) uncover that the employment of ICT by either teachers or students could create a positive motivational impact on learning. The motivation here is defined as a positive support for students' responsibility to maintain a desire to learn and carry out learning activities. Further, Passey, Rogers, Machell, and McHugh (2004) also mention a number of motivational impacts on learning as follows.

1. Quality of work

It is reported that students are motivated to engage in learning tasks more when the teacher encourages students to employ ICT in the classroom. It is obvious that the quality of work is increased when they utilize ICT in the learning process. Furthermore, the motivational impact is arising through the employment of ICT. It is proven by the students' work quality, particularly in term of writing appearance and presentation. It also helps to engage students, aids them to increase their vocabulary mastery, enables them to explore things in greater depth, affects coursework positively, and the likes.

2. Attitude towards school work

The utilization of ICT also influences students' attitude towards schoolwork. The study claims teachers' feel about ICT is assisting students to access their work more, getting more sources, studying more, and creating interaction to their work. Moreover, the availability of hundreds of sources supports the students to fulfill and

complete the task effectively without the teachers' command on it all over the time. In short, the easy access to the ICT employment enable the students to improve their quality of work by sorting and selecting more appropriate sources to finish the task effectively.

3. Homework

The study indicates that ICT is supporting students to complete the task efficiently. It works best on word processing, email that supports coursework and homework completion that make them easy to access it everywhere. In brief, ICT is a useful thing to help the students fulfill their task and facilitate them to finish their work on time.

4. Students’ confidence

The students' confidence is shown particularly by lower ability students. It is because they finally could do and show things, they had not been able to do before. Furthermore, by the employment of ICT, they could explore more and share the idea with others. In addition, students' confidence also increases in terms of the quality of the work or its presentation. Since it improves their independence, they take time and work on their own step. They are also able to show what they have been achieved. Moreover, the way they share their thought with other students also improve as their confidence show progress.

5. Impact on attainment

Study reports a positive relationship between ICT and students' attainment. It uncovers the existing indication of students' attainment that progress from the utilization of ICT. It also shows improvement on the students' motivation that appear in the form of good progression. Accordingly, the motivation seems influence students' attainment, since they pose good learning performance. On the other hand, reinforcement and practice offered by ICT might also influence students' attainment as they are able to remember and interact more during the lesson.

All in all, the motivational impact on learning that has been studied by Passey, Rogers, Machell, and McHugh (2004) is a little out of huge benefit students' might obtain when the teachers use ICT in their teaching. Indeed, it is the teacher who plays a crucial role in how to integrate ICT in his/her classroom. The success of the integration also depends much on his responsibility and knowledge on ICT (Mumtaz, 2006). Therefore, the advanced technology employs in the classroom without an appropriate technique is useless. After all, teachers' ability and competence are what matter in assisting students to pose better achievement in the future learning. It is clear that the employment of technological tools in the classroom can enhance students' motivation in learning. In the same vein, Balanskat, Blamire, and Kefala (2006) mention ICT has a positive impact on behavior,

motivation, communication and process skills. Adding to this, they insert that the most regular effect of ICT is on students' motivation.

Further, Al-Munawwarah (2014) on her study of teachers' perception on the use of ICT in Indonesian EFL learning context revealed three advantages of utilizing ICT in English language teaching and learning. Those include facilitating students an interesting and enjoyable learning, supporting their autonomy and motivating the students' learning. Even though ICT can assist student learning effectively, teachers should be able to employ it properly. As what Kenning (2007) emphasizes that ICT integration in language learning should not only consider to improve classroom activities and student motivation, but also more practical to exploit student experience in the community outside.

More, ICT integration somehow increases students' motivation in the process of teaching and learning. Then again, millennial students might not impress on the use of technology, in particular practice, since technology is something usual for them. Therefore, the creative and innovative teacher might be demanded in today's teaching era. Further, attract students' attention is another challenge to be able to assist students in learning successfully.

2. Teacher

In this section, the researcher tries to elaborate the teachers' competence and their consideration in integrating ICT in the teaching and learning process.

a. Competence

1. The definition of teachers' competence

Teachers are standing at the front line to improve students' education quality since they are interacting directly with the students in the classroom. The standard of education quality is in the teaching and learning process and its teaching practice of the educators (Watkins, 2011). In line with this statement, teachers play a crucial role as an educator that will guide, assist, assess, and support students to achieve a standard quality of education. Teacher competence stands for several domains, namely skills, knowledge, attitudes, and motivational variables (Kunter, et al., 2013). Those domains are not inherent, yet again through learning and can be taught to somebody.

Moreover, teacher ability to prepare and develop teaching and learning material is important. In fact, myriad sources are available, yet, teacher ability to select and sort appropriate materials for the students need to be emphasized. Furthermore, in developing language learning material Tomlinson (2011) argues that material development should organize the following things: 1) clarify the term and concept that commonly use in the material development; 2) carry out a systematic evaluation of the materials to find out how the material facilitate language learning; 3) consider the material development application into language use; 4) consider the material development application for both teacher and students is valuable in teaching and learning; and 5) gather

the support from stakeholders (researchers, writers, teachers' students, publishers) to develop good quality material.

In conclusion, teachers' competence is closely related to the ability to prepare and develop teaching materials. It also includes a number of domains namely skills, knowledge, attitudes, and motivation towards their profession as a teacher.

2. The standard of teachers' competence

There are four standards of teacher competence namely pedagogy, personality, professional and social. Teachers must have those competencies so that they can truly contribute as educators honestly with dedication. Mulyasa (2013) inserts that pedagogical competence is the ability to manage the students' learning that covers an understanding of learners, instructional design and implementation, learning outcome evaluation, and the development of students to actualize their potential. In addition, pedagogical competence refers to teachers' cognitive ability.

Beside pedagogical competence, the teacher needs to pose personality competence that refers to self-personality. It does not gain through direct learning in the formal education context, yet most are formed as a result of the learning experience (Wardoyo, 2015). Therefore, teachers' personality cannot instantly be changed. The more they experience things, their personality will be shaped.

Accordingly, professional competence is fairly important to pose a teacher's competence. It refers to the condition, direction, values, goals,

and the quality of expertise also authority concerning to live and living (Wardoyo, 2015). The teachers are categorized as a professional if they have an adequate educational qualification, competence of particular science field, good communication skill, own a creative spirit, productive, committed as a professional, have a will to continuously develop their abilities (Wardoyo, 2015).

Professional competence means teachers should be able to be responsible for his/her job as an educator. Mulyasa (2013) mentions several components in professional competence they are first, teachers should be able to understand and apply educational-based philosophically, psychologically, sociologically and so forth. Second, teachers should be able to understand and apply learning theories based on students' competence. Third, teachers should be able to develop his/her own subject responsibly. The subsequent, teachers should be able to understand and apply various learning methods. Next, teachers should be able to develop and utilize suitable learning media. Sixth, teachers should be able to organize learning program effectively. Next, the teacher should be able to do an evaluation towards student learning outcome. Finally, teachers should be able to develop students' good character. Those components are the basis of teachers' professional competence. The teacher should pose at least those basic components to be categorized as a professional teacher.

Finally, the last teacher competence is social. The teacher has to be able to engage with the community. Maintain good relation with a workmate, students, parents, and the other school's stakeholder is important (Mulyasa, 2013). By doing so, the teacher can consult his/her teaching difficulty to find a solution together in the form of sharing session, seminar, and the like. Therefore, the four teachers' competencies could be the standard of their professionalism as a teacher to be able to respond to their job.

3. Teachers ICT mastery factors

A number of factors might contribute to the teachers' mastery of ICT integration. Buabeng-Andoh (2012) mentions one of them namely personal characters such as gender, age, educational experience and experience on the use of ICT contribute to the case. Regarding gender difference on the ICT integration, it has socioconstructed concept. UNESCO (2007) reports that the concept includes the characteristics, aptitudes, and probable behaviors of men (masculinity) and women (femininity). This concept is socially constructed. It is not biologically fixed forever as gender roles and expectations are learned. They can change time to time and vary within and between cultures (UNESCO, 2007). Gender roles are also modified by the difference of social system such as political status, ethnicity, class, physical and mental disability, age and others. Those also include parents and peer groups expectation (Tondeur, Velde, Vermeersch, & Houtte, 2016). Therefore, women and

men might have different knowledge, experience, talents, beliefs, and needs regarding computer as well as ICT (Tondeur, Velde, Vermeersch, & Houtte, 2016). As the computer becomes more and more integrated into society and as more people have access to and use computers, the so-called gender gap, if it did exist at all, would now be narrowing (Tondeur et al., 2016)

Studies have been revealed the use of ICT by teachers gender difference (Buabeng-Andoh, 2012; Jones, 2004; Braak, Tondeur, & Valcke, 2014; Mahdi & Al-Dera, 2013). Those confirm that the differences of ICT use by gender do exist and vary based on difference knowledge, experience and capability. Baubeng-Andoh (2012) reports male and female teacher use of ICT is different based on the frequent use of it. The male teacher is reported more frequent use than the female teacher. Further, Baubeng-Andoh (2012) adds that their technical capabilities also are different as the male teacher poses better knowledge on the technical capability than the female, he also masters several tools of ICT better than the female teacher. This finding is also supported by Mahdi and Al-Dera (2013) who say that females teacher use ICT in the instruction less than the male teacher. Further, Jones (2004) asserts that male and female teacher difference on the level of anxiety as the female teacher has much more degree of anxiety than the male teacher. However, the differences in gender might gradually disappear if the

teacher more acquaints with the use of ICT and its tools (Braak, Tondeur, & Valcke, 2004).

In addition, language teachers might develop their knowledge and skill in technology use and enhance their competency in applying numerous types of computer activities (Son & Robb, 2011) to fit this digital era. Further, to continue and develop teachers' ICT-related skills, they should have regular access to the relevant ICT equipment (Trucano, 2005). Therefore, teachers' experience on the use of ICT might also contribute to the factor of technological mastery.

Rosa (2016) on his study explains the teachers' experience on the technological use. In this case, experience defines as the skill achieved through the involvement or experience of something over a period of time (Mukhari, 2016). Further, Rosa (2016) adds that the experienced teachers use ICT less regularly than novice teacher. It happens because experienced teachers view insufficiency of sources as well as knowledge on it. The less experienced teachers use ICT in preparing the lesson and in the classroom with the students. Meanwhile, experienced teachers only use it in preparing the lesson. The percentage use of ICT for both teachers is quite different as the less experienced teachers got more exposure on it. Another reason for this fact is that they have different competence in the use of ICT. In attending the training, Rosa (2016) also reports that the fewer experience teachers mostly have attended the training on general computer application such as word-processing, spreadsheets,

presentation, as well as databases which are categorized as technology-use, multimedia approach, and social network activity. On the other hand, the experienced teachers have attended equipment-specific training such as a laptop, liquid -crystal display (LCD) and so on which are categorized as a basic computer application. This might be the reason the experienced teacher uses ICT in a lower percentage of time than less experienced teachers.

This statement in line with what Mukhari (2016) argues on the study that the teacher applied ICT in the high school studied was a considerably young teacher than her colleagues. The young teacher said that most of the other teachers retire soon, so they did not get the urgency to learn and use ICT in their classroom. Mukhari (2016) also adds that young teachers usually adopt ICT in their teaching as they already encountered and used it in their previous educational stage. Therefore, they do not experience significant obstacles when it comes to the integration in the instructional process, unlike the experienced teachers who tend to hold on the conventional teaching.

In more detail, Trucano (2005) lists a number of crucial points regarding teachers' ICT professional development as follows.

1) The support and on-going training for the teachers is a serious matter to maximize the successful use of ICT in education;
2) Teachers' professional development is a process, it cannot be seen as in the event;

3) The introduction of ICT develops the need for teachers' on-going professional development;
4) Three important phases of teacher professional development cover pre-service, in-service, and ongoing formal and informal pedagogical as well as technical support;
5) The effective teachers' professional development should give the appropriate model for effective teaching instruction;
6) The assessment training method is also another important thing to be considered in professional development; and
7) On-going, regular support for the teachers is vital in the professional development by offering complete facilities, i.e. group discussion, e-mail communities, radio or television broadcast.

Indeed, more experience with the use of technology enables to support the teachers in integrating ICT in their instructional activity. This experience also contributes to their consideration as well as attitude to technology use. Therefore, the teacher who has more experience in the technology use, most of them are young teachers, could employ ICT regularly in their teaching and learning process.

b. The Consideration of ICT Integration Practice

A number of factors might influence teachers' consideration in integrating ICT into their teaching and these factors unconsciously affect students learning. Mumtaz (2006) mentions some factors preventing the

practice, namely lack of teaching experience with ICT, lack of on-site support for teachings using technology, lack of help supervising children when using computer, lack of ICT specialist teachers to teach students computer skills, lack of computer availability, lack of time required to successfully integrate technology into the curriculum, and lack of financial support. Those factors are crucial for teachers are the model in the classroom. They will not take a risk of human error or technical problem that might happen during the class. Those factors mention hindering the teachers to employ ICT in their class.

In addition, Drent and Meelissen (2008) categorize the factors of ICT practice into a couple of categories include non-manipulative and manipulative factors. Non-manipulative refers to the factors of teachers their selves, it cannot be manipulated by the school. Those include age, teaching experience, teacher educational computer experience and the availability of external support for schools. Meanwhile, the manipulative factors come from things outside the teachers cover the teachers' attitudes towards teaching and ICT, teachers' ICT knowledge and skills, school's commitment regarding the process practice and ICT support availability. All in all, a number of factors might influence teachers' consideration in the practice of ICT during the teaching and learning process. Likewise, the facts come from two sides include the teachers as an educator and the schools as the practice field. They have the same portion regarding the practice of ICT to support learning. One main point should be highlighted

is that the teacher and the school cannot be separated. They are united. Teacher support the success of the school and vice versa. Hence, both the teacher and school play a crucial role in the successful implementation of ICT to support learning.

The teachers also should consider the effectiveness strategy in implementing ICT for teaching and learning purpose. Granito and Chernobilsky (2012) propose a number of questions to be addressed when the teachers want to develop and implement an electronic approach: 1) how the teachers could make the best use of new technology opportunities to maximize language study and practice while at the same time help the students to develop computer-based communication skill? 2) what strategy for communicating and networking could be taught for the students? 3) what goals should be focused by the language teacher or what kind of online project should be accomplished by the students to achieve the goals? 4) which are the most crucial electronic sources and tools could be taught to the students? and 5) how the teacher could encourage the students to be an autonomous learner who can continue learning effectively using ICT outside the classroom. These questions could become the teachers' guideline to an effective application of ICT in their instructional activity.

In brief, the employment of ICT in the classroom teaching and learning is crucial to assist the students develop their skills. To do so, the teachers' knowledge on the ICT integration should be well-improved.

The utilization of the existing technology from school and home use probably could improve teachers' proficiency on the technological experience.

3. Student

In this section, the researcher describes the students' motivation and several factors might contribute to motivation.

a. Motivation

Motivation is a crucial thing in learning (Klimova & Poulova, 2014). Accordingly, it becomes necessary to give the impression to the students about the learning material, hence more meaningful learning can be attained. Adding to this, Dornyei (2001) states from the content of the email from a friend said that the more he teaches and observes more than hundreds of different teachers, in the last ten years, the more he believes that motivation is what matters. This statement implies that someone with unlimited motivation in learning, pose better than the one who lacks motivation. In short, motivation, support learning the most, since highly motivated students will present an excellent performance compared to brilliant with less motivation.

Previous research by Dornyei (2001) has emphasized that motivation is an intangible, hypothetical concept that is used to explain why people think and act as they do. In relation to this statement, he believes that motivation is vague. He illustrates that if a certain student is classified as a motivated one, teachers and parents can well imagine

a keen, a committed and enthusiastic student who has good intention in learning, who studies dynamically and intensively, and who demonstrates persistence. In addition, the term motivation is highlighted as the basic characteristic of the human mind. It relies on three different functions. The first is a conative function, that refers to someone wants or desires. The second is a cognitive function that indicates what one rationally thinks. And last but not least is an effective function that relates how one feels. Moreover, he adds that students' keenness, cleverness, and temperament are all obvious features when teachers describe a student. All in all, motivation is greatly affected how one pose and can easily judge the result whether one is motivated or not.

Furthermore, motivation usually uses to describe successful and unsuccessful students (Dornyei, 2001). In addition, he also adds that adequate motivation can support students to achieve a second language (L2) knowledge despite their aptitude or other cognitive characteristics. Adequate motivation refers to students' enthusiasm, commitment, and persistence during the process of mastering a foreign language. Students with no adequate motivation, even the cleverest students seem improbable to persevere long enough in attaining any useful language (Dornyei, 2001). In short, it is important to develop and maintain students' motivation during the process of learning, particularly foreign

language learning. By doing so, the learning process will be more meaningful and finally, it contributes to gaining delighted result.

Regarding the integration of ICT, Passey, Rogers, Machell, and McHugh (2004) propose several motivational measures of it, namely learning goal, academic efficacy, identified regulation, intrinsic motivation, performance approach goal, external regulation, and amotivation. The definition of those motivational measures includes: 1) learning goal as the engaging reason in the activity using ICT as an indication of personal understanding and competence; 2) academic efficacy as an individual believes of their capability in designing and executing the courses to obtain a particular goal using ICT; 3) identified regulation as realizing the values that might happen by engaging in the task using ICT and begin to share; 4) intrinsic motivation as the degree to which ICT directly engages the students and hold their interest; 5) performance approach goal as the engaging reason for the activity using ICT is the opportunities to achieve positive feedback about someone's competence; 6) performance avoidance as the engaging activity aim using ICT is to avoid feedback and recommendation of lack competence, often accomplished by finding excuses of not engaging in the task; 7) external regulation as a willingness to engage in work with ICT because one feels obliged to do so by someone else who probably an authority figure such as a teacher. One may recognize but not in any way share the reasons why the other wants this; and 8) amotivation as

a lack of any particular reason for engaging with ICT supported work. There is no internal reason for wanting to engage in the work, and while others have told you that you must do it, it is not clear why.

Those eight motivational measures become the basis of the questionnaire development. Beside the researcher also adapted several other sources to support the questionnaire development form Young (2003) and Granito and Chernobilsky (2012).

b. Students Motivational Factors

Motivation is one the most important things in acquiring a foreign language (Ariane & Pascale, 2012), therefore, a careful attention should be considered to keep the students well-motivated. A number of factors might contribute the degree of students' motivation and some of them are gender (BECTA, 2008; Yau & Cheng, 2012; Palmen, 2011; Passey, Rogers, Machell, & McHugh, 2004) and parents' education (Farooq, Chaudhry, Shafiq, & Berhanu, 2011; Usher & Kober, 2012; Amponsah, Milledzi, Ampofo, & Gyambrah, 2018). Parents' education here is defined as their latest educational background, whether they have higher education or not. Hence, the researcher uses the term of parents' education which means parents' recent educational background in this study.

Regarding gender difference, female and male would learn the proper behaviors and attitudes from the family, society, and the overall culture they grow up with, hence, the socialization enables to produce

non-physical gender differences (Zoghi, Kazemi, & Kalani, 2013). The difference of life exposure allows male and female having a different cognitive ability as well. A study by Achampong (2012) reveals that males are more skillful than females using basic software. Further, females tend to be trailed behind male counterpart in several competencies such as spreadsheets, word processing, email, presentation package, internet and file management (Achampong, 2012). This finding is also in line with a study by Tondeur, Velde, Vermeersch, and Houtte (2016) that boys or men tend to have a more positive attitude towards computer than girls or female as computers are perceived as a male belonging domain like electronics and machinery. Furthermore, Tondeur, Velde, Vermeersch, and Houtte (2016) add at the beginning of 1985, Hawkins claimed that the design, development, and repair of technical types of equipment have been stereotyped as masculine. As a result, male or boys tend to pose better performance on computer-related equipment as compared to female or girls.

Studies do confirm students' motivation is different by gender (BECTA, 2008; Yau & Cheng, 2012; Palmen, 2011; Passey, Rogers, Machell, & McHugh, 2004). BECTA (2008) classified the difference based on the purpose, anxiety level, and skill. Girls students use ICT more for school work but have a great amount of anxiety as well as less confidence, and more dependence on boys regarding school related in

guiding them on how to use ICT. On the other hand, boys use it for leisure activities, less anxiety and more confidence as they might pose greater ICT skill, in some areas, than girls. This finding is also supported by Yau and Chen (2012) in the Hong Kong context that male students have more confidence for learning than do female. Boys are also indicated have a greater home use of ICT, computer game use, and ICT motivates boys more than girls (Palmen, 2011). Boy and girl appeared to be motivated in different ways. Boys seemed to be motivated in particular cases, but girls were not seen to be disadvantaged (Passey, Rogers, Machell, & McHugh, 2004).

In addition, parents also have their own role as they are in the inner children' cycle and the closest to them (Chevalier, Harmon, Sullivan, & Walker, 2013). Studies argue that students' motivation is differed by their parents' education (Farooq, Chaudhry, Shafiq, & Berhanu, 2011; Usher & Kober, 2012; Amponsah, Milledzi, Ampofo, & Gyambrah, 2018). Parents' play a crucial role in supporting children academic achievement and performance (Usher & Kober, 2012). Further, Farooq, Chaudhry, Shafiq, and Berhanu (2011) mention that students' whose parents are educated score better than those whose parents were not educated. This happens because educated parents can communicate better with their children regarding school work and activities. In line with this, Amponsah, Milledzi, Ampofo, and Gyambrah (2018) say that educated parents can better assist students to

work and participate at school as well as share the information taught at the school. Further, Amponsah et al. (2018) report that the involvement of parents in the school-related activities could improve students' better performance and attainment.

Gonida and Urdan (2007) insert that parents education level affecting their parenting style, particularly on children schooling and homework. They also tend to be strict regarding school-related work, as they expect high achievement on their children. The students of educated parents also more confident, experienced, and resourceful than those with less educated parents (Khan, Iqbal, & Tasneem, 2015). Educated parents could create a conducive environment that facilitates learning, show interest in children's academic performance, and ensure children seriousness in the study. Moreover, more educated parents could afford a better childhood experience and home environment, as a result, the children could do better in school-related activities with positive motivation (Dekar, 2016). Therefore, the educated parent probably could control, monitor, and assist students' learning, hence, their motivation likely difference to those less educated parents.

In brief, as the students' motivation is a vital part in learning as well as acquiring the language, conducive learning environment and adequate assistance from both teachers and parents might better support their satisfactory accomplishment. Therefore, students could be offered by secure learning atmosphere both in the home and school setting.

B. Review of Related Studies

A study by Kreutz and Rhodin (2016) in the influence of ICT on learners' motivation towards learning English report that the use of ICT gives a positive contribution to the majority of the students. The students' motivation also reported increase due to the different atmosphere offered by the ICT in the EFL classroom and they enjoy it. They are also happier as the lesson gets more fun by incorporating ICT into the classroom. The external and internal factors such as curiosity, interest, feeling of competence, confidence, attitude from parents and peers also appear when the teacher use ICT.

Regarding the students' motivation on the integration of ICT, boys and girls are reported difference motivation. Palmen (2011) reveals a study in UK context on the difference of boys and girls motivation that boys indicated have a greater home use of ICT, computer game use, and ICT motivates boys more than girls. Boys also more likely to have access to two or more computers or laptops while girls have access to only one computer/laptop.

In addition, students' motivation difference is not only captured from their gender. Farooq, Chaudhry, Shafiq, and Berhanu (2011) who conducted the study in Pakistan context mention that students' motivation is also differed based on parents' education. They add further that students' whose parents are educated score better than those whose parents were not educated. This happens because educated parents can communicate better with their children regarding schools work and activities. As a result, the motivation might differ

as their parents have different background study and indeed, their understanding of the school-related activities also difference.

In the integration of ICT practice by the teachers, Teo (2008) who conducted a study in Singapore context argue that there is a difference between experienced and less experienced teachers on the integration of ICT in the classroom. The teacher with many years of teaching experience found to be less confident with the use of the computer as they were not experiencing computer education at their college. They seem less confident as they experience less computer use, therefore, they tend to avoid it in the teaching practice. Conversely, the frequent use of computer and develop various computer related skills can increase their computer experience as well as knowledge. Finally, it contributes to the enhancement of the teachers' positive feeling of the computer use.

Gender difference also resulted in the different integration of ICT in the classroom. Baubeng-Andoh (2012) reports that male and female teacher use of ICT is different based on the frequent use of it. The male teacher is reported more frequent use than the female teacher. Further, Baubeng-Andoh (2012) adds that their technical capabilities also are different as the male teacher poses better knowledge on the technical capability than the female, he also masters several tools of ICT better than female teacher.

The present study tries to examine the influence of ICT integration practice on the students' motivation and find out the difference in ICT integration practice and students' motivation by demographic variables.

Although a number of studies already conducted in the theme of ICT integration in ELT, the study on ICT integration and motivation difference by demographic variables (i.e. teacher gender, teaching experience, student gender, and parents' education) are rarely found in the previous studies. Therefore, this study is important to be conducted to reveal the finding and contribute in enriching the result of previous studies.

C. Conceptual Framework

The development of technology in this digital era does not only influence the economy, business, and transportation sector. It also comes to the education area as well which contributes to a better instructional process in the classroom. More, it offers huge benefits in the teaching and learning activity that contributes to the students' satisfactory attainment. The presence of ICT in the education area brings a new way of the teaching process which put the students at the center of learning activity. Indeed, this new way of teaching is different from the conventional teaching which is dominated by the teacher.

Considering the teaching and learning activity using ICT, teacher and student become a part of it that cannot be separated as they work together to achieve the intended goal of learning. The students' motivation in learning, however, become one of the crucial things to accomplish it. The teacher, on the other hand, supervises and control students learning using ICT to capture the progress of their learning. Further, the teachers also use ICT in the instructional process to offer the new way of learning as well as improve the students' interest in it even though their ICT integration practice might differ as the

teacher has gender and teaching experience difference. Further, the teachers' practice of ICT integration probably influences the students' motivation in ELT. As the students' motivation might also differ by their gender and parents' education, therefore, the teacher should consider those difference to be able to increase students' motivation. More, although the study on ICT integration and students' motivation theme has been examined by previous researchers, few of them studied it in the Indonesian context. Therefore, in this study, the researcher tries to examine the influence of ICT integration practice on the students' motivation and find out the difference on ICT integration practice and the students' motivation by demographic variables. This concept was illustrated in the figure below.

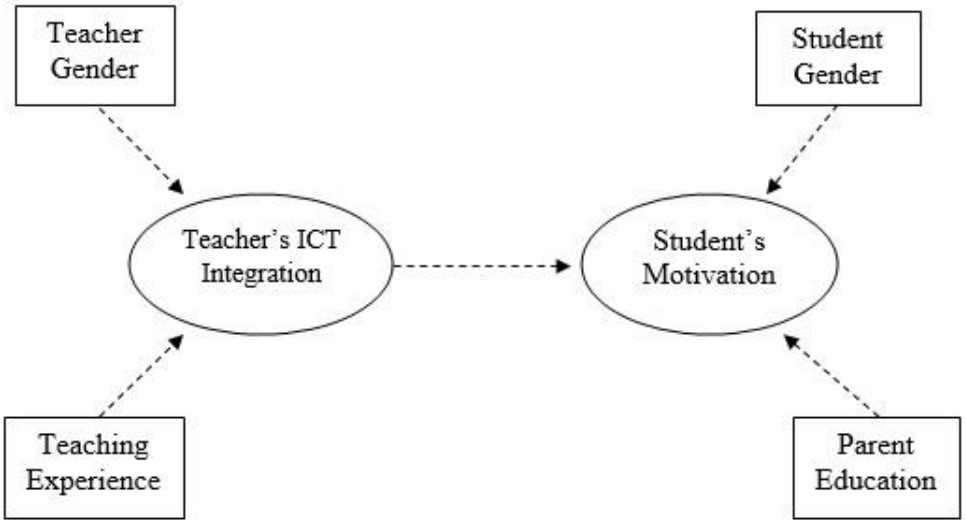

Figure 1. The Conceptual Framework

C. Hypothesis Statement

Based on the literature review and review of related studies, the hypothesis statements are derived below.

1. There is a significant influence of ICT integration practice on the students' motivation.
2. There are significant differences in ICT integration based on teacher gender.
3. There are significant differences in ICT integration based on teaching experience.
4. There are significant differences in students' motivation based on gender.
5. There are significant differences in students' motivation based on parent education.

CHAPTER III

RESEARCH METHOD

This chapter discusses the method applied in this research. It covers the type of the research, the setting of the research, population and sample, research variables, data collection technique, instruments, validity and reliability, and finally this chapter is closed by the explanation of data analysis technique. The elaboration of those components is written below.

A. Type of the Research

This research is quantitative in the form of a correlational study, which presents the results in a numerical form. This study focuses on examining influence of ICT integration practice on the students' motivation and find out the difference of ICT integration practice and the students' motivation by demographic variables.

B. The Setting of the Research

This research was conducted in six senior high schools, particularly public schools in Yogyakarta city. It was started in the beginning of February and finished in the middle of April 2018.

C. Population and Sample

Yogyakarta city was selected based on two reasons. First, it follows a realistic population proposed by Lodico, Spaulding, & Voegtle (2010). A smaller part of a grand population is called a realistic population. Ideally, the population of this research is all of the schools in the Yogyakarta special region, yet, the researcher has to cut down this grand population and select a smaller part called realistic population namely Yogyakarta city. Second, Yogyakarta city is in the

highest rank of national examination result, particularly in English subject of the secondary public schools. The city also already transformed as a cyber-city, therefore, the incorporating of ICT in the classroom could probably influence the students' motivation.

Regarding the sampling, the researcher decided to use simple random sampling to find out the sample as this kind of sampling allows the researcher to find the sample objectively. In selecting the sample randomly, the researcher took 6 different schools as the sample of the study to represent the population. There are 11 secondary public schools in Yogyakarta city to be selected randomly. First of all, the researcher wrote the symbol of the 11 schools on a piece of paper (i.e. A, B, C, and soon), rolled them, and picked 6 schools randomly without noticing which school was taken and finally got the sample. In this research, the researcher also included 2 teachers each school. The vice principle suggested which teacher could support the study. Furthermore, the students were selected based on where the teachers taught them. Thus, the researcher took one class in each teacher's classroom. Therefore, the sample was 6 schools, 314 students and 12 teachers from 6 schools.

D. Research Variables

In this research, the variables include dependent and independent variables. The independent variable is ICT integration practice and the dependent variables is the students' motivation. In addition, the researcher also employs the characteristics of the research participants such as the teacher gender, teaching experience, the student gender and parent education which known as demographic variables. These

demographic variables are independent variables by definition as they cannot be manipulated like dependent variable (Salkind, 2010).

E. Data Collection Technique

In collecting the data, the researcher applied two kinds of the questionnaires to find out the teachers' practice of ICT integration and the students' motivation towards the ICT integration practice. The data collection is elaborated below.

The first is the teachers' ICT integration practice questionnaire. The questionnaire aims to find out teachers' ICT integration practice, to what extent they integrate ICT in their teaching-learning activity. It was presented in the form of a Likert scale that includes four possible choices, namely *strongly agrees, agrees, disagrees, strongly disagrees*.

The last is the students' motivation questionnaire. The researcher utilized the questionnaire to find out the students' motivation during the practice of ICT integration, to find out whether or not ICT practice influence students' motivation. The questionnaire model was quite similar to the one in the teachers' questionnaire. The scale was comprised as follows: 1 as strongly agree, 2 as agree, 3 as disagree, 4 as strongly disagree. In organizing the questionnaire, first, the researcher created the indicators of the instrument as the guidance for adapting the instrument. Meaning that the instrument indicators become the most important part in organizing the questionnaire to collect the data.

F. Instruments

The instruments of this study include teachers' ICT practice questionnaire and students' motivation on ICT integration practice questionnaire. These

questionnaires were adapted from difference sources. The teachers' ICT integration practice was adapted from Braak, Tondeur, and Valcke (2004), while the students' motivation on ICT integration was adopted from Passey, Rogers, Machell, McHugh (2004). The detailed blueprint of those two questionnaires is presented in the following table.

1. The Teachers' ICT Integration Practice Questionnaire

The way how teachers use ICT in the classroom was captured from the answer to the questionnaire given to the teachers. The following table is the blueprint of teachers' ICT practice questionnaire.

Table 1. The Blueprint of Teachers' ICT Integration Practice Questionnaire

No	Aspects	Indicators	Item(s) number	Number of items	Source
1.	Principal component	1. Supportive computer use	1, 2, 3, 9, 10	5	Braak et al. (2004)
		2. Class use	6, 8, 12, 13, 14, 15	6	Braak et al. (2004)
		3. Frequency use	4, 5, 7, 11	4	Braak et al. (2004)
2.	Attitude	1. Attitudes toward computer	24, 25, 26, 27, 28, 29, 31, 34	8	Braak et al. (2004)
		2. General computer attitude	16, 17, 18, 20, 32, 33,	6	Braak et al. (2004)
		3. Technological innovativeness	19, 21, 23, 30, 35, 36	6	Braak et al. (2004)

2. The Students' Motivational Questionnaire

In this questionnaire, the students were instructed to answer the questions regarding their motivation on ICT integration by the teachers in the classroom.

Table 2. The Blueprint of Students' Motivation Questionnaire

No.	Motivational measure	Item number	Number of items	Source
1.	Learning goal	1, 2, 3, 4	4	Passey et al. (2004)
2.	Academic efficacy	5, 6, 7, 8	4	Passey et al. (2004)
3.	Identified regulation	9, 10, 11, 12	4	Passey et al. (2004)
4.	Intrinsic motivation	13, 14, 15, 16	4	Passey et al. (2004)
5.	Performance approach goal	17, 18, 19, 20	4	Passey et al. (2004)
6.	Performance avoidance	21, 22, 23	3	Passey et al. (2004)
7.	External regulation	24, 25, 26, 27	4	Passey et al. (2004)
8.	Amotivation	28, 29, 30	3	Passey et al. (2004)

G. Validity, Reliability, and Readability

The instruments in this research must pose good validity and reliability so that, those can be used to collect the data. Furthermore, the researcher utilized face and content validity to validate the questionnaire. Face validity deals with the appearance of the questionnaire, whether it is clear enough for the students or not (Anderson, 2005). On the other hand, the content validity of the questionnaire was obtained by presenting it to an expert in the same field. The researcher utilized Pearson product-moment to check whether the instruments were valid or not. It

approves all of the items both student and teacher questionnaires (Appendix 11 and 12).

Whereas in a reliability test, the researcher employed Cronbach Alpha. According to Sekaran & Bogie (2016), the reliability of less than 0.6 is considered to be poor, in the range 0f 0.7 – 0.79 is stated to be acceptable and above 0.8 is stated to be good. The result of Cronbach Alpha for students' motivation questionnaire was 0.702 and teachers' practice of ICT integration was 0. 980. In brief, the result of Cronbach Alpha of the instruments was considered acceptable and good for both students and teachers' instruments.

Further, to examine instruments' readability, the researcher distributed the instruments to the students and teachers within the population. The participants were instructed to evaluate the statements on the questionnaire whether those have been already clear and had no multiple meaning or not. After the readability test, the instrument was ready to collect the data.

H. Data Analysis Technique

All of the data gathered from the data collection stage were analyzed using several data analysis types cover Pearson-product moment, *t*-test, analysis of variance (ANOVA) and regression analysis. The *t*-test was utilized to examine the difference between the two groups, while analysis of variance was used to examine the differences from more than two groups. In this study, the researcher examined ICT integration practice and the students' motivation differences based on demographic-related variables. The demographic variables cover in this study were teacher gender (male/female), teaching experience (in the range of year experience;

<20, 20-30, and >30), student gender (boys/girls) and parent education (contain three categories; elementary graduate, secondary, and higher education). In examining students' and teachers' gender difference, a t-test was utilized, while ANOVA was employed to examine the difference in teaching experience and parents' education that contain more than two groups. Moreover, the regression analysis was utilized to predict the change of the exposure variable (Salkind, 2010). In this study, linear regression was utilized to examine the change of the dependent variable (students' motivation) by the explanatory variable/exposure (ICT integration). All of the data analyses were calculated using SPSS version 22.

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

This chapter was divided into four sections namely the description of research findings, hypotheses testing, discussion, and limitations. The explanation is elaborated below.

A. Description of Research Findings

1. Respondents' Data

The respondents in this research consisted of students and teachers. There were 314 students including 154 males and 160 females. In other words, most of them or 51% of the respondents were female students and the rest, 49.0%, were male students. Conversely, there were 12 respondents who were teachers which consisted of 5 male teachers and 7 female teachers. In percentages, 41.7% of the teachers were male and 58.3% of them were female. Similarly, the teachers were mostly female. The details of the respondents' gender are illustrated in the following table.

Table 3. Respondents' Gender

Gender	Students	%	Teachers	%
Male	154	49.0	5	41.7
Female	160	51.0	7	58.3
Total	**314**	**100**	**12**	**100**

In addition, parents' recent education was divided into three categories based on Law No. 20 Year 2003 namely basic education, secondary education, and higher education. The basic education covers the nine-year basic education based on Indonesia's government regulation i.e. elementary school (SD) and junior high school (SMP). Secondary

education is the continuation of basic education called senior high school or other schools in the same level like SMK (vocational school) or MA (*Madrasah Aliyah*). However, this study focuses on senior high school students only. Furthermore, the higher education consists of a diploma, bachelor, master, and doctorate program. The following table presents the details of parents' recent education.

Table 4. Parents' Recent Education

Recent education	Father		Mother	
	Frequency	**%**	**Frequency**	**%**
Primary school	90	28.7	111	35.4
Secondary school	11	3.5	11	3.5
Higher education	213	67.8	192	61.1
Total	**314**	**100**	**314**	**100**

Based on the table above, most parents were able to pursue education until the level of higher education. As many as 213 or 67.8% of them were the fathers and 192 or 61.1% were the mothers. Primary school graduate placed in the second position for the parents' recent education which consisted of 90 or 28.7% fathers and 111 or 35.4% mothers. Finally, few of them graduated from secondary school i.e. 11 or 3.5% of the fathers and 11 or 3.5% of the mothers.

The teachers' teaching experience was divided into three categories namely less than 20, 20-30, and more than 30 years of experience. The details on the teachers' teaching experience is presented in the table below.

Table 5. Teachers' Teaching Experience

Category	Teacher	%
<20 year	5	41.7
20-30 year	5	41.7
>30 year	2	16.7
Total	12	100

The table above presents the frequency of the teachers' teaching experience. There were 5 teachers who had less than 20 years of experience. Meanwhile there were 5 teachers who had 20-30 years of experience. Finally, there were 2 teachers who had the most experience teaching for more than 30 years. Therefore, the number of teachers who are less experienced and those who have average experience is equal.

2. Descriptive Statistics Result

The descriptive statistics result was presented into two categories namely student and teacher. It includes the total of the students and the teachers, the minimum score, the maximum score, the average score, and the standard deviation. The details are shown in the table below.

Table 6. Descriptive Statistics Result

Category	N	Min	Max	Mean	Std. Dev
Student	314	64	104	85.67	5.631
Teacher	12	101	129	115.42	9.913

The table displays the descriptive statistics of the students and the teachers. There were 314 students and 12 teachers. The lowest score from the student questionnaire was 64, whereas, from the teacher questionnaire the lowest score was 101. In addition, the highest score for both student and teacher questionnaire was 104 and 129 respectively. In addition, the

mean score of the students was 85.67 and 115.42 for the teachers. Finally, the standard deviation was 5.631 for the students and 9.913 for the teachers. This descriptive statistics result was calculated based on the resulting questionnaire distributed to the students and the teachers.

B. Hypotheses Testing

The hypotheses of this study were analyzed using regression analysis, *t*-test, and ANOVA. The regression analysis was done to find out the influence in predictor and outcome variable. In addition, the ANOVA and *t*-test were performed to know the difference in the variables. The hypotheses are presented below.

1. The First Hypothesis

This section provides an explanation to address the first hypothesis, i.e. there is a significant influence of ICT integration practice on the students' motivation. A regression analysis was run to find out the influence between variables.

Table 7. Regression Analysis Summary of ICT Integration on the Students' Motivation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.197[a]	.039	.036	5.795

a. Predictors: (Constant), ICT integration

As shown in Table 7, the R column represents the value of R or correlation coefficient. On the other hand, the R square column represents the R2 value which is the proportion variance of the dependent variable

explained by the exposure/explanatory variable (R2 = .039). This value means the explanatory variable explained 3.9% of the variability of the dependent variable. In other words, the influence of ICT integration on the students' motivation has a contribution of 3.9%. Finally, the summary of ANOVA from the first hypothesis is presented in the following table.

Table 8. ANOVA Table Indicating a Significant Influence between Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	423.649	1	423.649	12.614	.000[b]
	Residual	10478.685	312	33.586		
	Total	10902.334	313			

a. Dependent Variable: students' motivation
b. Predictors: (Constant), ICT integration

Table 8 shows that the regression model predicts the dependent variable (students' motivation) significantly. It shows the p-value of .000 which means $p < .05$ and suggests that the explanatory variable significantly predicts the dependent variable, $F(1, 312) = 12.614$, $p < .05$.

Table 9. Coefficient Regression Summary Predicting Students' Motivation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	71.322	4.045		17.634	.000
	ICT integration	.123	.035	.197	3.552	.000

a. Dependent Variable: students' motivation

The table above presents a summary of coefficient regression. The model of regression above is presented below.

Students' motivation = 71.322 + .123

The value 71.322 refers to a constant value. The value leads to the conclusion that if the teacher does not integrate ICT, students' motivation decreases as much as 71.322. Furthermore, the unstandardized coefficients column indicates how much the dependent variable varies with the explanatory variable when another explanatory variable remains constant. Meanwhile, the value of .123 is a coefficient regression value. In this case, ICT integration practice is equal to .123. This value means that if the teacher integrates ICT in the classroom, it gives a positive effect to the students' motivation as much as .123. The significant value shows the *p*-value of .000 ($p < .05$). Hence, ICT integration significantly explained the students' motivation.

2. The Second Hypothesis

This section provides an explanation to address the second hypothesis namely, there is a significant difference in ICT integration based on the teacher's gender. The analysis was run using the mean data of ICT integration. The researcher used the independent sample *t*-test to find out the difference in ICT integration based on the teacher's gender (male and female).

Table 10. The Result of Independent Sample *t*-test ICT Integration Based on the Teacher's Gender

	Male ***M*** **(SD)**	**Female** ***M*** **(SD)**	**t-value**	**p-value**
ICT Integration	132.02 (4.49)	124.24 (3.29)	3.26	.01

Table 10 presents the result of *t*-test for ICT integration based on the teacher's gender. It was found that male teachers (M = 132.02, SD = 4.49) integrate ICT more frequently than female teachers (M = 124.23, SD = 3.29). It is also clear that there is a positive and significant difference in ICT integration based on gender (p = .01). Therefore, the second hypothesis was accepted.

3. The Third Hypothesis

This section revealed the analysis to address the third hypothesis namely there is a significant difference in ICT integration based on teaching experience. The ANOVA test was run to find out the difference. The teaching experience was divided into three categories: (a) 1 is for < 20 years; (b) 2 is for 20-30 years; and (c) 3 is for > 30 years. In summary, the researcher labeled 1 for a less experienced teacher, 2 for an average-experienced teacher, and 3 for an experienced teacher. The results were shown in the following table.

Table 11. One-Way ANOVA of ICT Integration Based on Teaching Experience

ANOVA

ICT Integration

	Sum of Squares	df	Mean Square	F	Sig.	Post hoc
Between Groups	160.167	2	416.500	3.155	.009	1 > 3
Within Groups	4648.500	9	80.083			
Total	4808.667	11				

It can be concluded from the result of one-way ANOVA that there was a statistically significant difference in the ICT integration based on teaching

experience (F = 3.15, p = .009). The post hoc analysis found that less experienced teachers had better competence in ICT related-knowledge than the experienced teachers (Appendix 7). Therefore, the third hypothesis was accepted.

4. The Fourth Hypothesis

This section provides the analysis to address the fourth hypothesis namely there is a significant difference in students' motivation based on gender. The analysis was run using the mean data of the students' motivation. The researcher used independent sample *t*-test to find out the difference of motivation based on gender (boy and girl).

Table. 12 The Result of Independent Sample *t*-test on Motivation Based on the Students' Gender

	Boy ***M*** **(SD)**	**Girl** ***M*** **(SD)**	**t-value**	**p-value**
Motivation	.20212(1.18)	.15242 (1.05)	2.79	.002

Table 12 presents the result of *t*-test for motivation based on the student's gender. It was found that boys (M = .20212, SD = 1.18) showed better motivation on the ICT integration than girls (M = .15242, SD = 1.05). It is also clear that there is a positive and significant difference in students' motivation based on gender (p = .002). Therefore, the fourth hypothesis was accepted.

5. The Fifth Hypothesis

This section reveals the analysis to address the fifth hypothesis namely there is a significant difference in students' motivation based on parent's education. The ANOVA test was run to find out the difference. The

researcher categorized parent's education into three categories: (1) A is for elementary (SD/SMP) graduate; (2) B is for secondary graduate (SMA); and (3) C is for higher education graduate (D3/S1/S2/S3). The results are presented below.

Table. 13 One-Way ANOVA of Students' Motivation Based on Father Education

ANOVA

Motivation

	Sum of Squares	df	Mean Square	F	Sig.	Post hoc
Between Groups	383.342	2	151.171	3.382	.031	C > A
Within Groups	1084.992	311	34.862			
Total	1468.334	313				

It can be concluded from the result of one-way ANOVA that there was a statistically significant difference in the students' motivation based on the fathers' education (F [2,311] = 3.38, p = .031).

Table. 14 One-Way ANOVA of Students' Motivation Based on Mother Education

ANOVA

Motivation

	Sum of Squares	df	Mean Square	F	Sig.	Post hoc
Between Groups	127.512	2	53.756	2.107	.018	C > A
Within Groups	10894.822	311	15.032			
Total	11022.334	313				

It can be concluded from the result of one-way ANOVA that there was a statistically significant difference in the students' motivation based on the mothers' education (*F* [2,311] = 1.107, *p* = .018).

To summarize, the analyses of the two post hoc of the father and mother's education, found that educated parents could engage more with their children and it indirectly shapes their motivation (Appendix 9 and 10). Therefore, the fifth hypothesis was accepted.

C. Discussions

In this discussion, the researcher focuses it on the objectives of the study that cover two main points namely the influence of ICT integration practice on the students' motivation and the difference of ICT integration practice and the students' motivation based on demographic variables. The detailed elaboration is presented below.

1. The influence of ICT integration practice on the students' motivation

The analysis results showed that there was a significant influence on ICT integration practice on the students' motivation in English language teaching. This finding clearly explained the previous theories (Kenning, 2007; Area-Moreira, Hernández-Rivero, & Sosa-Alonso, 2016; Samuel & Bakar, 2006; Kreutz & Rhodin, 2016; Passey, Rogers, Machell, & McHugh, 2004) that emphasize the benefits of ICT integration including the enhancement of students' learning motivation. Indeed, the finding of this study proved that the integration of ICT in the instructional process by the English language teachers could assist the students in learning as well as improve their motivation. This was demonstrated by the positive responses

in the students' motivation questionnaire of the ICT integration practiced by the teachers during the instructional process.

A number of benefits offered by integrating ICT in the classroom include improving the standard, accessibility, and cost-efficiency of the teacher's instructional delivery (Ghavifekr & Rosdy, 2015). It also could improve peer cooperation, improve students' motivation, transform teaching instruction to be more student-centered, and improve higher-order-thinking as well as problem-solving skills (Hassanzadeh, Gholami, Allahyar, & Noordin, 2012). In addition, ICT also offers a different way of learning by promoting collaborative learning, improving communication skills, increasing the teacher and students' motivation through various activities, and offering advanced as well as updated information (Hassanzadeh, Gholami, Allahyar, & Noordin, 2012). In line with this, Riasati, Allahyar, and Tan (2012) propose several benefits of ICT integration such as 1) the improvement of students' motivation and engagement during the tasks completion; 2) the improvement on students' academic ability by the change in their attitude and possible increase in self-confidence; 3) the movement of teaching and learning paradigm from the teacher to the student-centered; 4) the development of students assessed in

the form of collaborative skills; 5) the engagement of student collaborative learning due to a bigger access with the world; and 6) the decrease in the students' learning anxiety.

Moreover, the integration of ICT in ELT could also improve the students' English language skills such as listening, speaking, reading, and writing (Akhtar, 2016) through its tools. Sheir, Eltomy, and Mostafa (2014) state that the use of a well-equipped lab might be one of the appropriate solutions for teaching listening skills. In the lab, the teacher could assist the students on the access of authentic material such as poems, speeches, or native speaker talks with superb devices in it. Furthermore, Kavitharaj (2017) argues that the use of multimedia tools on speaking skills could enhance students' oral skills by the use of a native talk video. By watching and listening to the video, the students could observe the way the native speaks, give a stimulus to practice, and use the language willingly as they could learn fluency and correct use of language directly from the native speaker.

In addition, Liu and Ko (2016) claim that the use of online information that has become popular in recent decades also offers a different way of learning to improve students' reading skill. It can be achieved by offering

an adequate online reading environment which emphasizes on specifying and directing the search activity, evaluating the appropriate as well as trustworthy information, and incorporating fragmented information through browsing process (Liu & Ko, 2016). On the writing skill development, Henao (2017) reports that an online platform could improve students' writing performance, vocabulary mastery, and confidence. Moreover, the utilization of computer language learning programs present a bigger chance for the students to study texts, grammar, and vocabulary that also motivates them to practice the language by interacting with people in various situations (Henao, 2017). To summarize, the presence of ICT tools variation in ELT facilitates the students' learning for not only knowing the language but also practicing it in their day to day life.

The teacher pattern of ICT integration was in the supportive computer and class use. This pattern was mostly performed by younger teachers in the school as they have enough experience in ICT compared to older teachers. This pattern of ICT uses is also mentioned by Braak, Tondeur, and Valcke (2004) that individual knowledge on the use of computer determined the teacher's practice on it. Therefore, a younger teacher who is presumably well-exposed on technological use could integrate ICT in supportive and

class use patterns better. Furthermore, the teachers have a positive attitude on ICT integration even though their ICT competence is quite limited. Most of the teachers are aware of the beneficial uses of ICT to support the teaching and learning process as illustrated in the questionnaire's positive responses.

2. The differences of the ICT integration practice and the students' motivation based on demographic variables

This sub-section provides discussions on the difference between ICT integration practice and the students' motivation based on demographic variables. The demographic variables that were examined in this study include the teacher's gender, teaching experience, the student's gender, and parents' education. Those are elaborated in the following sub-sections.

a. ICT integration and teacher's gender

The concept of gender is different from the term of sex. Gender includes the characteristics, aptitudes, and probable behaviors of men (masculinity) and women (femininity), while sex describes biological differences of men and women which is already determined at birth and contain a universal meaning (UNESCO, 2007). This concept is socially constructed. It is not biologically fixed forever as gender roles and expectations are learned. They can change time to time and vary within and between cultures (UNESCO, 2007). Gender roles are also modified by the difference in social systems such as political status, ethnicity, class, physical and mental disability, age, and others. Those also include

parents and peer group expectations (Tondeur, Velde, Vermeersch, & Houtte, 2016). Therefore, women and men might have different knowledge, experience, talents, beliefs, and needs regarding computer as well as ICT use (Slik, Hout, & Schepens, 2015).

The present study found that there was a significant difference on ICT integration practice based on the teacher's gender. This finding confirms a number of previous studies that have reported the difference between males and females in integrating ICT in the instructional practice (Buabeng-Andoh, 2012; Jones, 2004; Braak, Tondeur, & Valcke, 2014; Mahdi & Al-Dera, 2013). Baubeng-Andoh (2012) reports that male and female teacher's use of ICT differs based on the frequent use of it. The male teacher is reported to use ICT more frequently than the female teachers. Furthermore, Baubeng-Andoh (2012) states that their technical capabilities are also different as the male teacher possesses better knowledge on the technical capability than the female. He also masters several ICT tools better than the female teacher. This finding is also supported by Mahdi and Al-Dera (2013) who say that female teachers use ICT in their instruction less than male teachers. In addition, Jones (2004) asserts that male and female teacher's use of ICT differs based on the level of anxiety as the female teacher has much more degree of anxiety compared to the male teacher. However, the differences in gender might gradually disappear if the teacher gets more acquainted with the use of ICT and its tools (Braak, Tondeur, & Valcke, 2004).

Finally, as the computer becomes more and more integrated into society and more people have access to it, the so-called gap in gender could become narrower (Tondeur et al., 2011).

b. ICT integration and teacher teaching experience

The findings based on the analysis results explained that there was a difference in teachers' ICT integration practice based on their teaching experience. This finding approved previous theories (Mumtaz, 2006; Teo, 2008; Drent & Meelissen, 2008; Rosa, 2016) which argue that the experienced and less experienced teachers have a different practice of ICT integration in the classroom. Those with more experience in technological activities tend to use ICT more regularly than those with less experience. This statement leads to the point that the teachers who have more experience with technology-related activities are young/less experienced teachers as they have more exposure on technology than experienced/older teachers.

Moreover, Teo (2008) reports that teachers with many years of teaching experience are found to be less confident with the use computers as they did not have computer education when they were at college. Similarly, Mumtaz (2006) mentions that a limited amount of experience on the use of ICT might prevent the teachers to utilize ICT in their instructional practice. Therefore, a personal background in technology matters in deciding whether to integrate it or not. Regarding the teachers' personal background in technology, a less experienced teacher makes use

of the computer every day, while an experienced teacher uses it almost monthly (Rosa, 2016). This fact leads to the other fact that less experienced teachers become more resourceful and innovative while the experienced teacher becomes less motivated and prefer traditional resource and activities instead. This statement is suitable with the teachers in this study because the teachers with many years of teaching experience tend to rely on their conventional teaching methods.

In addition, the way less experienced and experienced teachers integrate ICT shows a difference as well. The less experienced teachers use it to prepare the lesson and in the teaching instruction. On the other hand, experienced teachers only use it to plan the lesson (Rosa, 2016). In addition, Rosa (2016) also mentions that less experienced teachers are more exposed to everyday relevant ICT activities such as using the Internet to prepare the lesson and collecting learning sources and materials. The experienced teacher, however, does ICT-related activities only once a week.

This statement is in line with what has been argued by Mukhari (2016) on the findings of his study in high school. It reveals that the teacher who applied ICT was considerably younger than her colleagues. The young teacher said that most of the other teachers would be retiring soon. Therefore, they did not get the urgency to learn and use ICT in their classroom. Mukhari (2016) also adds that young teachers usually adopt ICT in their teaching as they already encountered and used it in their

previous educational stages. Consequently, they do not experience significant obstacles when it comes to the integration in the instructional process, unlike the experienced teachers who tend to hold on to conventional teaching.

c. Students' motivation and gender

It is clear that gender is socially constructed (UNESCO, 2007). Boys or males and girls or females would learn the proper behaviors and attitudes from the family, society, and the overall culture they grow up with. Hence, the socialization produces non-physical gender differences (Zoghi, Kazemi, & Kalani, 2013) such as cognitive ability. A study by Achampong (2012) reveals that males are more skillful than females in using basic software. Furthermore, females tend to trail behind their male counterparts in several competencies such as spreadsheets, word processing, email, presentation package, internet, and file management (Achampong, 2012). This finding is also in line with a study by Tondeur, Velde, Vermeersch, and Houtte (2016) that boys or men tend to have a more positive attitude towards computers than girls or females as computers are perceived as a male domain like electronics and machinery. Furthermore, Tondeur, Velde, Vermeersch, and Houtte (2016) say Hawkins at the beginning of 1985 claimed that the design, development, and repair of technical types of equipment have been stereotyped as masculine. As a result, males or boys tend to pose better on computer-related equipment compared to females or girls.

The present study found that there was a significant difference on motivation by student gender. Studies have also reported that boys' and girls' motivation differ based on their gender difference (BECTA, 2008; Yau & Cheng, 2012; Palmen, 2011). BECTA (2008) classified the difference based on the purpose, anxiety level, and skill. Female students use ICT more for school work but have a greater amount of anxiety as well as less confidence. They are also more dependent on boys regarding how to use ICT. On the other hand, boys use it for leisure activities, have less anxiety, and have more confidence as they might pose greater ICT skills in particular areas compared to girls. This finding is also supported by Yau and Chen (2012) in the Hong Kong context that male students have more confidence for learning than females. It is indicated that boys also have a greater home use of ICT and computer game use, and ICT motivates boys more than girls (Palmen, 2011). Boys seemed to be motivated in particular cases, but girls were not seen to be disadvantaged (Passey, Rogers, Machell, & McHugh, 2004), even though studies mention that the differences of motivation between boy and girl students do exist.

d. Students' motivation and parents' education

The findings of the present study found a significant difference in motivation and parent's education. It approves previous theories that reported the difference on students' motivation based on parents' education (Farooq, Chaudhry, Shafiq, & Berhanu, 2011; Usher & Kober,

2012; Amponsah, Milledzi, Ampofo, & Gyambrah, 2018). In addition, parents have their own role as they are in the inner children's cycle, and they are the closest to them (Chevalier, Harmon, Sullivan, & Walker, 2013). Studies argue that students' motivation differs based on their parents' education (Farooq, Chaudhry, Shafiq, & Berhanu, 2011; Usher & Kober, 2012; Amponsah, Milledzi, Ampofo, & Gyambrah, 2018). Parents play a crucial role in supporting children's academic achievement and performance (Usher & Kober, 2012). Furthermore, Farooq, Chaudhry, Shafiq, and Berhanu (2011) mention that students whose parents are educated score better than those whose parents are not educated. This happens because educated parents can communicate better with their children regarding school work and activities. In line with this, Amponsah, Milledzi, Ampofo, and Gyambrah (2018) say that educated parents can better assist students to work and participate at school as well as share the information taught at the school. Additionally, Amponsah et al. (2018) report that the involvement of parents in the school-related activities could improve students' performance and attainment.

Gonida and Urdan (2007) assert that parents' education level affects their parenting style particularly on children schooling and homework. They also tend to be strict regarding school-related work, as they expect high achievement in their children. The students of educated parents are also more confident, experienced, and resourceful than those

with less educated parents (Khan, Iqbal, & Tasneem, 2015). Educated parents could create a conducive environment that facilitates learning, shows interest in children's academic performance, and ensures children's seriousness in their studies. Moreover, more educated parents could afford a better childhood experience and home environment (Dekar, 2016). As a result, the children could do better in school-related activities with positive motivation. Therefore, the educated parents probably could control, monitor, and assist students' learning. Hence, their motivation is likely to be different to those less educated parents.

D. Limitations of the Study

The findings of this study have at least three limitations. First, the results of this study are limited to the listed schools in the research. It cannot be generalized to all the schools in Yogyakarta since the researcher focused the study on particular public schools in Yogyakarta based on the results of national examination scores. Based on the national examination scores, the researcher took the school with the highest score. Therefore, the results of this study cannot be generalized to the schools out of the category.

Second, this study did not cover the whole demographic variables as it only took gender, teaching experience, and parents' education as the demographic variables. The consideration was because the researcher would like to be more focused on particular demographic variables that probably offered a bigger contribution to the calculation as they probably have close differences on each variable studied.

Third, the term ICT integration in this study covers the whole ICT tools. The meaning is quite general. It was not specific in particular tools that support teaching and learning.

Finally, this study did not examine the relationship of ICT integration and students' motivation by demographic variables. It only explained the differences between variables. Probably, an in-depth study on the relationship between those variables could be noteworthy.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

This chapter covers three sections namely conclusions, implications, and suggestions to the study.

A. Conclusions

The findings of this study have led to a couple of crucial conclusions. First, the integration of ICT in the classroom instruction statistically influenced the students' motivation. Second, demographic-related variables in this study were found to significantly explain the difference in ICT integration and motivation. Male teachers showed a better practice of ICT than female teachers. Less experienced teachers also showed better knowledge as well as practice on ICT-related things than experienced teachers.

In addition, boys showed better motivation in ICT integration than girls. The students whose parents were educated also posed better motivation than those who had less educated parents.

B. Implications

The findings lead to several implications namely implications on theory, implications on practice, and implications on policy.

1. Implications on Theory

The application of ICT in English language teaching and learning offers a different experience of learning compared to learning without ICT. The chance to access authentic learning materials is bigger as it contains digital facilities such as internet access. The learning becomes student-oriented

(Meenakshi, 2013), enabling the students to be more communicative and independent. This change might assist the students to be better developed cognitively and socially.

The enlightenment of ICT integration practices on English language teaching and learning is assumed to raise teachers' awareness of the myriad advantages offered while still considering its disadvantages. This awareness is crucial for the teachers to be able to take a precise decision in selecting the most appropriate teaching technique to meet the students' learning needs.

2. Implications on Practice

As the findings did explain the importance of ICT integration on students' motivation, the teachers are expected to be more creative and innovative considering teaching methods and technique selection. It is because the students today are far more discerning about technology. In particular cases of technological use, they might be better than the teachers. Therefore, the teacher might combine technological use and conventional techniques so it can attract more student attention during learning.

3. Implications on Policy

The understanding of the elaborated theories in this study might expand the knowledge of the school stakeholders (teachers, parents, government, school principal) in initiating education policy, particularly in technology and language learning. The policy might be able to give more support to the integration of ICT with its rules to keep both teachers and students on the right track of educational concern. The support might be in the form of teacher's

training, workshops, or seminars as well as teacher sharing forums. By offering that kind of support, the teacher will be more knowledgeable and readier to assist students' learning successfully.

C. Suggestions

Related to the findings of this study, several suggestions are addressed to the teachers and future researchers. Those are enlightened as follows.

1. Suggestion for teachers

As today's technological era is quite fascinating, learning with technology becomes a common practice in education. Teachers are also demanded to utilize technology inside and outside the classroom activities. They should at least understand how to use technology either for classroom instruction or assessment report.

In the era of technology, students are easily exposed to upgrade innovation and the latest information on technological development. They probably use technology more often than the teachers. Therefore, creative teachers are highly recommended to figure out millennial students' expectations in learning. Therefore, teacher's self-improvement should be gradually sharpened.

Joining a sharing session, seminar, or another similar activity might help teachers to improve their creativity. Group sharing enables teachers to exchange ideas, teaching techniques, or methods to upgrade their ability and also professionalism as a teacher. Therefore, teachers should realize their responsibility to develop their knowledge and expand their ability for a better teaching performance.

2. Suggestion for the future researchers

Technology is quite broad, in fact. It is because information, communication, and technology consist of a lot of things. Future researchers who want to conduct a similar study might organize it to capture other parts of technology integration such as a focus on particular teaching tools and apply it into a larger number of populations to gain more acceptable generalization. They are also able to employ other kinds of data collection to support a more satisfactory result and also to deepen the present study's results.

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APPENDICES

APPENDIX 1. Students' Motivation Questionnaire English Version

Students' Motivation Questionnaire

Information Consent

I am Royana Mukorobin, a student of graduate program in Yogyakarta State University who is doing a thesis research. This research aims to know students' motivation regarding to the integration of ICT by teachers in the classroom. All of the information that is collected in this study will be treated confidentially. You are guaranteed that you will not be identified in any report of the study results.

There is no wrong and right answer. This questionnaire result will not influence your English score. All of the results of this questionnaire use as the data source of the research in ELT.

Notification!

The definition of ICT in this case is information and communication technology that include radio, television, computer, laptop, mp3 player, internet, camera, video, and the like.

A. Identity

Please write your name, class, dan school you belong. After that put a thick (√) on the other option.

Name :

Class :

School :

Gender : Male ( ) Female ( )

Parent latest education : SD/SMP ( ) SMA ( ) D3/S1/S2/S3 ( )

B. Questionnaire

Direction:

Please put a tick (√) on the most appropriate one, based on the following option.

SD : strongly disagree

D : disagree

A : agree

SA : strongly agree

Statements	Opinion			
	SD	D	A	SA
1. Schoolwork with ICT is more interesting.				
2. I pay more attention when lessons involve the use of ICT.				
3. I find all my school work interesting using ICT.				
4. The teacher interacted with the students on the Internet so that I feel less pressured in class.				
5. Using ICT helps me to choose the best place to start a piece of work.				
6. ICT lets me work whenever I want to.				
7. I work harder with ICT because it helps with my writing.				
8. I could learn new vocabulary, sentence patterns, and grammar using ICT.				
9. Using ICT helps me to get better marks in my work.				
10. ICT helps me to understand things better, because I can see examples in pictures, in video or other things that I can look at.				
11. ICT helps me to understand things better because I can listen to examples that are given in sound.				
12. The lesson is more fun when the teacher uses movies and pictures during the lesson.				
13. Using ICT makes me keen to go to every lesson.				
14. Using ICT makes me keen to go to school every day.				
15. I can work longer without losing my concentration when using ICT				
16. I get more motivated if I use computer or laptop during the lesson.				

17. I like being able to show other people how to do things when I am using ICT.				
18. I like being able to show other people that I could do my English work better using ICT.				
19. I could learn good English sentence from others using ICT and the Internet.				
20. I like being able to show other people how well I could practice English with ICT through chatting with my foreign friend.				
21. I get more involved with my work when I don't have to think about new ICT skills.				
22. I mess around more in class when I use ICT.				
23. I could finish my school work instantly and quickly using ICT.				
24. ICT will be important to me in the future.				
25. Using ICT now will be better for my future career and needs.				
26. I like working with ICT because it helps me work better with other people.				
27. I could often practice English since it is the common language on the Internet.				
28. Work without ICT grasps my attention better.				
29. Work without ICT make me feel more comfortable.				
30. I prefer to work on paper based project than use the computer				

APPENDIX 2. Students' Motivation Questionnaire Bahasa Indonesia Version

Angket Motivasi Belajar Siswa

Lembar Informasi

Saya Royana Mukorobin mahasiswi Program Pascasarjana Universitas Negeri Yogyakarta sedang melakukan sebuah penelitian untuk tesis. Tujuan dari penelitian ini adalah untuk mengetahui motivasi belajar siswa terhadap pengintegrasian ICT oleh para guru di kelas. Semua informasi yang dikumpulkan pada penelitian ini bersifat rahasia. Nama Anda tidak akan tercantum dalam laporan apapun.

Tidak ada jawaban benar atau salah. Hasil tidak akan mempengaruhi nilai Bahasa Inggris Anda. Semua hasil dari angket ini akan digunakan sebagai bahan dalam data penelitian pada pembelajaran dan pengajaran Bahasa Inggris.

Perhatian!

Pengertian kata ICT disini adalah teknologi informasi dan komunikasi yang meliputi seluruh media informasi dan komunikasi seperti komputer, laptop, LCD, radio, televisi, *mp3 player,* video, dan sebagainya.

A. Identitas

Tuliskan nama, kelas, dan sekolah Anda dan beri tanda centang (√) untuk identitas lainya.

Nama :

Kelas :

Sekolah :

Jenis kelamin : Laki-laki ( ) Perempuan ( )

Pend. Terakhir ortu : SD/SMP ( ) SMA ( ) D3/S1/S2/S3 ( )

B. Angket

Petunjuk Pengisian:

Berikan tanda centang (√) pada salah satu pilihan berikut ini yang sesuai dengan pendapat Anda.

STS : sangat tidak setuju
TS : tidak setuju
S : setuju
SS : sangat setuju

Pernyataan	Opinion			
	STS	TS	S	SS
1. Mengerjakan tugas sekolah dengan menggunakan ICT lebih menyenangkan.				
2. Saya lebih senang ketika pelajaran di kelas menggunakan ICT.				
3. Saya merasa semua tugas sekolah lebih menarik dengan menggunakan ICT.				
4. Guru juga melakukan interaksi dengan siswa melalui Internet sehingga saya tidak merasa tertekan di kelas.				
5. ICT dapat membantu saya menentukan tempat terbaik untuk memulai belajar.				
6. Dengan menggunakan ICT saya bisa belajar dimana saja.				
7. Saya belajar dengan giat menggunakan ICT karena ICT dapat meningkatkan kemampuan menulis saya.				
8. Saya dapat belajar kosa kata baru, pola kalimat dan tata Bahasa Inggris menggunakan ICT.				
9. ICT membantu saya memperoleh nilai baik pada pelajaran di sekolah.				
10. ICT membantu saya memahami sesuatu dengan baik, karena saya bisa melihat contoh dalam bentuk gambar, video dan hal lain yang dapat saya lihat.				
11. ICT membantu saya untuk memahami sesuatu dengan baik karena saya dapat mendengarkan contoh yang diberikan.				
12. Belajar Bahasa Inggris menjadi lebih menyenangkan ketika guru menggunakan berbagai film dan gambar selama mengajar.				
13. ICT membuat saya semangat untuk mengikuti setiap pelajaran.				

14. ICT membuat saya semangat untuk berangkat ke sekolah setiap hari.				
15. Saya dapat belajar lebih lama tanpa kehilangan konsentrasi ketika menggunakan ICT.				
16. Penggunaan komputer atau laptop membuat saya lebih termotivasi untuk belajar.				
17. Ketika menggunakan ICT, saya senang dapat menunjukan bagaimana cara menggunakanya kepada orang lain.				
18. Saya senang menunjukan kepada orang lain bagaimana saya mengerjakan tugas Bahasa Inggris saya dengan baik menggunakan ICT.				
19. Saya dapat belajar kalimat Bahasa Inggris dengan baik bersama orang lain menggunakan ICT dan Internet.				
20. Saya senang menunjukan kepada orang lain kemampuan Bahasa Inggris saya dengan ICT melalui *chatting* dengan teman dari negara lain.				
21. Saya dapat belajar dengan baik ketika saya tidak perlu memikirkan bagaimana cara menggunakan ICT.				
22. Saya melakukan hal-hal yang tidak penting ketika menggunakan ICT seperti, lebih banyak bermain-main dari pada fokus belajar.				
23. Saya dapat menyelesaikan tugas sekolah secara singkat dan cepat menggunakan ICT.				
24. ICT akan sangat penting untuk saya dimasa depan.				
25. Menggunakan ICT saat ini akan bermanfaat untuk karir dan kehidupan saya dimasa depan.				
26. Saya senang dapat bekerjasama dengan baik bersama orang lain dengan menggunakan ICT.				
27. Saya dapat berlatih Bahasa Inggris karena itu merupakan Bahasa yang umum di internet.				
28. Belajar tanpa menggunakan ICT membuat saya mampu berkonsentrasi dengan lebih baik.				
29. Belajar dengan ICT membuat saya merasa lebih nyaman.				
30. Saya lebih memilih menyelesaikan tugas dengan menggunakan kertas dari pada menggunakan komputer.				

APPENDIX 3. Teachers' Questionnaire of ICT Integration English Version

Teachers' ICT practice Questionnaire

Information Consent

I am Royana Mukorobin, a student of graduate program in Yogyakarta State University who is doing a thesis research. This research aims to know students' motivation regarding to the integration of ICT by teachers in the classroom. All of the information that is collected in this study will be treated confidentially. You are guaranteed that you will not be identified in any report of the results of the study.

There is no wrong and right answer. All of the result of this questionnaire will be the basis data of research in ELT.

Notification.
Computer definition in this questionnaire covers all of information and technology stuffs namely handphone, tablet, laptop, and the like. Conversely, the definition of ICT is information and communication technology that include radio, television, mp3 player, camera, video, and the like.

Direction:
Please write your name, NIP (employee index number), school where you belong, teaching experience (how long you have been teaching), dan gender in the following identity.

A. Identity

Name	: ……
NIP	: ……
School	: ……
Teaching experience	: ……
Gender	: ……

B. Questionnaire

Please put a tick (√) on the most appropriate one, based on the following option.

SD : strongly disagree
D : disagree
A : agree
SA : strongly agree

Statements	Opinion			
	SD	D	A	SA
1. I keep an agenda on the computer.				
2. I usually do administration, such as letters and reports.				
3. I use email for my job.				
4. I often looking for information on the Internet for lesson preparation.				
5. I rarely looking for educational software.				
6. I prepare worksheets for the students.				
7. Sometimes I construct a school website.				
8. I calculating students' test scores using computer.				
9. Computer use can encourage collaborative learning.				
10. Computer use encouraging students to train skills.				
11. I often ask the students to do assignments on the computer.				
12. I use computer as a tool for demonstration.				
13. I use computer as a tool for instruction.				
14. I often encourage the students to search for information on the internet.				
15. The use of computer can facilitate my teaching better.				

Statements	Opinion			
	SD	D	A	SA
16. The computer use can increase the level of students' creativity.				
17. The use of computer helps students to achieve better text writing.				
18. The efficiency of the learning process is increased through the use of computers.				
19. Computer knowledge and practical experience should be more integrated in the curriculum.				
20. The computer provides opportunity for improving the learning performance.				
21. Students with learning difficulties can strongly benefit from the didactic possibilities which the use of computers entail.				
22. The computer used as a learning tool, increases student motivation.				
23. Computers can help the teacher to apply differentiation among the students.				
24. When using computers, I'm afraid to break something.				
25. Computers make me nervous.				
26. I like working with computers.				
27. I will never be able to use computers.				
28. I have more negative than positive experiences with computers.				
29. Learning about computers is too time-consuming.				
30. I believe the need for the introduction of ICT in my practice.				
31. I find technological innovation beneficial for my teaching practice.				
32. I am not interested in the introduction of ICT in my classroom.				
33. I believe a progressive introduction of technology into education responds to our society's changing needs.				
34. I highly value the introduction of ICT in the classroom as an example of innovation.				

APPENDIX 4. Teachers' Questionnaire of ICT Integration Bahasa Version

Angket Pengintegrasian ICT oleh Guru

Lembar Informasi

Saya Royana Mukorobin mahasiswi Program Pascasarjana Universitas Negeri Yogyakarta sedang melakukan sebuah penelitian untuk tesis. Tujuan dari penelitian ini adalah untuk mengetahui motivasi belajar siswa terhadap pengintegrasian ICT oleh para guru di kelas. Semua informasi yang dikumpulkan pada penelitian ini bersifat rahasia. Nama anda tidak akan tercantum dalam laporan apapun.

Tidak ada jawaban benar atau salah. Semua hasil dari angket ini akan digunakan sebagai bahan dalam data penelitian pada pembelajaran dan pengajaran Bahasa Inggris.

Perhatian.
Pengertian kata komputer dalam angket ini mencakup semua yang berhubungan dengan IT (teknologi informasi) seperti *handphone*, *tablet*, *laptop*, dan sebagainya. Sedangkan pengertian ICT dibawah ini adalah teknologi informasi dan komunikasi yang meliputi seluruh media informasi dan komunikasi seperti radion, televisi, *mp3 player*, kamera, *video*, dan sebagainya.

Petunjuk:
Tuliskan nama, NIP, sekolah, lama mengajar, dan jenis kelamin pada identitas dibawah ini.

A. Identitas

Nama	: ……
NIP	: ……
Sekolah	: ……
Lama mengajar	: ……
Jenis Kelamin	: ……

B. Angket

Berilah tanda centang (√) pada pernyataan yang Anda anggap sesuai.

STS : sangat tidak setuju
TS : tidak setuju
S : setuju
SS : sangat setuju

Pernyataan	Pendapat			
	STS	TS	S	SS
1. Saya menyimpan catatan saya di dalam komputer.				
2. Saya biasa mengerjakan administrasi seperti persuratan dan laporan menggunakan komputer.				
3. Saya menggunakan email untuk bekerja.				
4. Saya sering mencari informasi di Internet untuk mempersiapkan pelajaran.				
5. Saya jarang mencari *software* yang berhubungan dengan pendidikan.				
6. Saya mempersiapkan lembar kerja untuk para siswa dengan bantuan komputer.				
7. Terkadang saya membuat sebuah situs/*website* untuk sekolah.				
8. Saya menyusun nilai para siswa dengan menggunakan komputer.				
9. Penggunaan komputer dapat meningkatkan *collaborative learning/*pembelajaran secara kelompok.				
10. Penggunaan komputer membantu para siswa untuk dapat melatih kemampuan mereka.				
11. Saya sering meminta para siswa untuk mengerjakan tugas-tugas dengan memanfaatkan ICT.				
12. Saya menggunakan komputer sebagai alat untuk mencontohkan sesuatu dalam pelajaran Bahasa Inggris didalam kelas.				
13. Saya menggunakan komputer sebagai alat untuk pengajaran.				
14. Saya sering meminta para siswa untuk mencari informasi yang berkaitan dengan pelajaran Bahasa Inggris di Internet.				
15. Penggunaan komputer dapat membantu pengajaran saya menjadi lebih baik.				

Pernyataan	Pendapat			
	STS	TS	S	SS
16. Penggunaan komputer dapat meningkatkan kreatifitas para siswa.				
17. Penggunaan komputer dapat membantu para siswa memiliki kemampuan menulis lebih baik.				
18. Pembelajaran menjadi lebih efektif saat menggunakan komputer.				
19. Pengetahuan tentang komputer dan pengalaman dalam menggunakanya seharusnya lebih ditekankan dalam kurikulum.				
20. Penggunaan komputer memberikan kesempatan kepada guru dan siswa untuk meningkatkan kualitas pembelajaran.				
21. Komputer yang cenderung tidak berubah-ubah fungsinya dapat sangat membantu para siswa yang memiliki kesulitan dalam belajar.				
22. Penggunaan komputer sebagai sebuah alat dalam pembelajaran dapat meningkatkan motivasi belajar siswa.				
23. Komputer dapat membantu guru memahami perbedaan karakteristik para siswa.				
24. Ketika menggunakan komputer, saya takut merusak sesuatu dalam mengoperasikannya.				
25. Menggunakan komputer membuat saya gugup.				
26. Saya senang bekerja menggunakan komputer.				
27. Saya tidak akan pernah bisa menggunakan komputer.				
28. Pengalaman buruk saya menggunakan komputer lebih dominan dari pada pengalaman baiknya.				
29. Belajar tentang komputer itu sangat membuang-buang waktu.				
30. Dibutuhkan latihan dalam pengenalan ICT.				
31. Saya merasa inovasi dalam bidang teknologi sangat bermanfaat untuk pengajaran saya.				
32. Saya tidak tertarik dengan penggunaan ICT didalam kelas.				
33. Saya percaya bahwa pengenalan teknologi dalam pendidikan secara berkelanjutan merupakan sebuah tanggapan terhadap perubahan kebutuhan kita.				
34. Saya menganggap bahwa pengenalan ICT didalam kelas merupakan contoh dari sebuah inovasi.				

APPENDIX 5. Validation Letters

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS NEGERI YOGYAKARTA
PROGRAM PASCASARJANA
Jalan Colombo Nomor 1 Yogyakarta 55281
Telepon (0274) 550836 pesawat 229, Fax (0274) 520326
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Nomor : 1219 /UN34.17/LT/2018 18 Januari 2018
Hal : Izin Validasi

Yth. Bapak/Ibu Nur Hidayanto Pancoro Setyo Putro, Ph.D.
Dosen Universitas Negeri Yogyakarta

Kami mohon dengan hormat, Bapak/Ibu bersedia menjadi validator instrumen penelitian bagi mahasiswa:

Nama : Royana Mukorobin
No. Mahasiswa : 16716251012
Prodi : Pendidikan Bahasa Inggris
Pembimbing : Dr. Agus Widyantoro
Judul : *The Influence of ICT Integration Practices toward Students' Motivation in English Language Teaching in Yogyakarta City*

Kami sangat mengharapkan Bapak/Ibu dapat mengembalikan hasil validasi paling lama 2 (dua) minggu. Atas kerjasama yang baik dari Bapak kami ucapkan terima kasih.

Wakil Direktur I,

Dr. Sugito, M.A.
NIP 19600410 198503 1 002

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS NEGERI YOGYAKARTA
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Laman: pps.uny.ac.id E-mail: pps@uny.ac.id

SURAT KETERANGAN VALIDASI

Yang bertanda tangan di bawah ini:

Nama : Nur Hidayanto PSP
Jabatan/Pekerjaan : Dosen
Instansi Asal : UNY

Menyatakan bahwa instrumen penelitian dengan judul:
The Influence of ICT Integration Practices toward Students' Motivation in English Language Teaching in Yogyakarta City
dari mahasiswa:

Nama : Royana Mukorobin
Program Studi : Pendidikan Bahasa Inggris
NIM : 16716251012

(sudah siap/~~belum siap~~)* dipergunakan untuk penelitian dengan menambahkan beberapa saran sebagai berikut:

1. Revisi sesuai arahan.
2. .....

Demikian surat keterangan ini kami buat untuk dapat dipergunakan sebagaimana mestinya.

Yogyakarta, 7 Februari 2018
Validator,

Nur Hidayanto PSP

*) coret yang tidak perlu

APPENDIX 6. ICT Integration Practice on the Students' Motivation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.197[a]	.039	.036	5.795

a. Predictors: (Constant), ICT integration

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	423.649	1	423.649	12.614	.000[b]
	Residual	10478.685	312	33.586		
	Total	10902.334	313			

a. Dependent Variable: students' motivation
b. Predictors: (Constant), ICT integration

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	71.322	4.045		17.634	.000
	ICT integration	.123	.035	.197	3.552	.000

a. Dependent Variable: students' motivation

APPENDIX 7. ICT Integration Practice by Teacher Gender

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
ICT Integration	Female	7	124.24	3.293	.523
	Male	5	132.02	4.491	.637

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
ICT	Equal variances assumed	1.607	.230	3.269	10	.012	4.417	. 822
	Equal variances not assumed			3.178	382.021	.011	4.417	.823

APPENDIX 8. ICT Integration Practice by Teaching Experience

ANOVA

ICT Integration

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	160.167	2	416.500	3.155	.009
Within Groups	4648.500	9	80.083		
Total	4808.667	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: ICT Integration

	(I) TE	(J) TE	Mean Difference (I-J)	Std. Error	Sig.
Bonferroni	1	2	7.800	.734	.320
		3	6.100*	.914	.001
	2	1	-7.800	.734	.320
		3	-1.700	.914	.290
	3	1	-6.100*	.914	.001
		2	1.700	.914	.290
Games-Howell	1	2	7.800	.545	.868
		3	6.100*	.623	.023
	2	1	-7.800	.545	.868
		3	-1.700	.321	.991
	3	1	-6.100*	.623	.023
		2	1.700	.321	.991

* The mean difference is significant at the 0.05 level.

1 = <20yr; 2 = 20-30yr; 3 = >30yr

TE = Teaching Experience

APPENDIX 9. Students' Motivation by Gender

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Motivation	Female	160	.1524289	1.05772316	.10201876
	Male	154	.2021255	1.18807654	.06893141

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Motivation	Equal variances assumed	1.001	.416	2.798	312	.002	.36652232	.13675866
	Equal variances not assumed			2.867	295.954	.000	.36652232	.13764755

APPENDIX 10. Students' Motivation by Fathers' Education

ANOVA

Motivation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	383.342	2	151.171	3.382	.031
Within Groups	1084.992	311	34.862		
Total	1468.334	313			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Motivation

	(I) FathEd	(J) FathEd	Mean Difference (I-J)	Std. Error	Sig.
Bonferroni	A	B	2.459	.886	.580
		C	6.141*	.886	.031
	B	A	-2.459	.886	.580
		C	-2.317	.886	.616
	C	A	6.141*	.886	.031
		B	2.317	.886	.616
Games-Howell	A	B	2.459	.842	.476
		C	3.141*	.701	.018
	B	A	-2.459	.842	.476
		C	-2.317	.713	.505
	C	A	3.141*	.701	.018
		B	2.317	.713	.505

* The mean difference is significant at the 0.05 level.

A = SD/SMP; B = SMA; C = D3/S1/S2/S3

FathEd = Father Education

APPENDIX 11. Students' Motivation by Mothers' Education

ANOVA

Motivation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	127.512	2	53.756	2.107	.018
Within Groups	10894.822	311	15.032		
Total	11022.334	313			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Motivation

	(I) MomEd	(J) MomEd	Mean Difference (I-J)	Std. Error	Sig.
Bonferroni	A	B	1.559	.706	.342
		C	2.293*	.706	.019
	B	A	1.559	.706	.342
		C	1.266	.706	.520
	C	A	2.293*	.706	.019
		B	1.266	.706	.520
Games-Howell	A	B	1.559	.424	.619
		C	2.293*	.684	. 019
	B	A	1.559	.424	.619
		C	1.266	.403	.580
	C	A	2.293*	.684	. 019
		B	1.266	.403	.580

* The mean difference is significant at the 0.05 level.

A = SD/SMP; B = SMA; C = D3/S1/S2/S3

MomEd = Mother Education

APPENDIX 12. Validity Result of ICT Integration Questionnaire

Correlations

ICT Integration

	Pearson Correlation	Sig. (2-tailed)	N
T1	.739**	.006	12
T2	.727**	.007	12
T3	.906**	.000	12
T4	.867**	.000	12
T5	.825**	.001	12
T6	.629*	.029	12
T7	.776**	.003	12
T8	.763**	.004	12
T9	.658*	.020	12
T10	.635*	.027	12
T11	.772**	.003	12
T12	.772**	.003	12
T13	.674*	.016	12
T14	.757**	.004	12
T15	.809**	.001	12
T16	.790**	.002	12
T17	.808**	.001	12
T18	.906**	.000	12
T19	.741**	.006	12
T20	.846**	.001	12
T21	.891**	.000	12
T22	.836**	.001	12
T23	.679*	.015	12
T24	.831**	.001	12
T25	.831**	.001	12
T26	.804**	.002	12
T27	.831**	.001	12
T28	.930**	.000	12
T29	.670*	.017	12
T30	.702*	.011	12
T31	.861**	.000	12
T32	.906**	.000	12
T33	.653*	.021	12
T34	.889**	.000	12
T35	.943**	.000	12
SUM	1		12

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX 13. Validation Result of Students' Motivation Questionnaire

Correlations

Motivation

	Pearson Correlation	Sig. (2-tailed)	N
Q1	.455**	.000	314
Q2	.445**	.000	314
Q3	.186**	.001	314
Q4	.293**	.000	314
Q5	.371**	.000	314
Q6	.269**	.000	314
Q7	.234**	.000	314
Q8	.423**	.000	314
Q9	.347**	.000	314
Q10	.250**	.000	314
Q11	.304**	.000	314
Q12	.134*	.018	314
Q13	.112*	.047	314
Q14	.204**	.000	314
Q15	.388**	.000	314
Q16	.506**	.000	314
Q17	.361**	.000	314
Q18	.333**	.000	314
Q19	.338**	.000	314
Q20	.200**	.000	314
Q21	.155**	.006	314
Q22	.326**	.000	314
Q23	.242**	.000	314
Q24	.260**	.000	314
Q25	.316**	.000	314
Q26	.277**	.000	314
Q27	.291**	.000	314
Q28	.264**	.000	314
Q29	.228**	.000	314
Q30	.157**	.005	314
SUM	1		314

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).