

**TEACHER'S TECHNOLOGY INTEGRATION LEVELS  
FOR ENGLISH CLASSROOM INSTRUCTION  
AT 12<sup>TH</sup> GRADE OF MAN 2 GRESIK JAWA TIMUR**

**THESIS**

Submitted in partial fulfillment of the requirement for the degree of  
Sarjana Pendidikan (S. Pd) in Teaching English



By:

Nuril Imamah  
NIM D75214068

ENGLISH TEACHER EDUCATION DEPARTMENT  
FACULTY OF EDUCATION AND TEACHER TRAINING  
UIN SUNAN AMPEL  
SURABAYA  
2019

## PERNYATAAN KEASLIAN TULISAN

Yang bertanda tangan di bawah ini:

Nama : Nuril Imamah

NIM : D75214068

Fakultas/Prodi : Fakultas Ilmu Tarbiyah dan Keguruan/Pendidikan  
Bahasa Inggris

Dengan ini menyatakan sebenar-benarnya bahwa skripsi yang berjudul **“Teacher’s Technology Integration Levels for English Classroom Instruction at 12<sup>th</sup> Grade of MAN 2 Gresik Jawa Timur”** adalah benar-benar merupakan hasil karya sendiri. Segala materi yang diambil dari karya orang lain hanya untuk digunakan sebagai acuan dengan mengikuti tata cara dan etika penulisan karya ilmiah yang ditetapkan oleh jurusan.

Demikian pernyataan ini dibuat dengan sebenar-benarnya, apabila pernyataan tidak sesuai dengan fakta yang ada, maka saya selaku penulis bersedia dimintai pertanggungjawaban sesuai ketentuan peraturan perundang-undangan yang berlaku.

Surabaya, 25<sup>th</sup> January 2019  
Pembuat Pernyataan



Nuril Imamah  
NIM. D75214068

## ADVISOR APPROVAL SHEET

This thesis by Nuril Imamah “Teacher’s Technology Integration Levels for English Classroom Instruction at 12<sup>th</sup> Grade of MAN 2 Gresik Jawa Timur” has been approved by the thesis advisors for further approval by the boards of examiners.

Surabaya, 3<sup>rd</sup> January 2019

Advisor I,



Rizka Safitryani, M. Pd  
NIP. 198409142009122005

Advisor II,




M. Syaifudin, M. Ed, Ph. D  
NIP. 197310131997031002

## EXAMINER APPROVAL SHEET

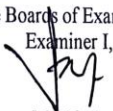
This thesis by Nuril Imamah entitled “Teacher’s Technology Integration Levels for English Classroom Instruction at 12<sup>th</sup> Grade of MAN 2 Gresik Jawa Timur” has been examined on 25<sup>th</sup> January and approved by the board of examiners



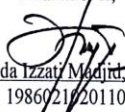
Dean,

  
Prof. Drs. H. Ali Mas'ud, M. Ag., M. Pd.I.  
NIP. 196301231993031002

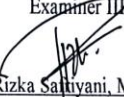
The Boards of Examiners,  
Examiner I,

  
Drs. Muhtarom, M. Ed. Grad. Dip. TESOL  
NIP. 196512201992031005


Examiner II,

  
Hilda Izzati Majid, MA  
NIP. 198602102011012012

Examiner III,

  
Rizka Saktiyani, M. Pd.  
NIP. 198408142009122005

Examiner IV,

  
Dr. Siti Asmahan, S.Pd. M. TESOL  
NIP. 1977041420060402003



**KEMENTERIAN AGAMA  
UNIVERSITAS ISLAM NEGERI SUNAN AMPEL SURABAYA  
PERPUSTAKAAN**

Jl. Jend. A. Yani 117 Surabaya 60237 Telp. 031-8431972 Fax.031-8413300  
E-Mail: [perpus@uinsby.ac.id](mailto:perpus@uinsby.ac.id)

LEMBAR PERNYATAAN PERSETUJUAN PUBLIKASI  
KARYA ILMIAH UNTUK KEPENTINGAN AKADEMIS

Sebagai sivitas akademika UIN Sunan Ampel Surabaya, yang bertanda tangan di bawah ini, saya:

Nama : Nuril Imamah  
NIM : D75214068  
Fakultas/Jurusan : Tarbiyah dan Keguruan/Pendidikan Bahasa Inggris  
E-mail address : nuril13imamah@gmail.com

Demi pengembangan ilmu pengetahuan, menyetujui untuk memberikan kepada Perpustakaan UIN Sunan Ampel Surabaya, Hak Bebas Royalti Non-Eksklusif atas karya ilmiah :

☒ Skripsi ☐ Tesis ☐ Desertasi ☐ Lain-lain (.....)

yang berjudul :

Teacher's Technology Integration Levels for English Classroom Instruction at 12<sup>th</sup> Grade of

MAN 2 Gresik Jawa Timur

berserta perangkat yang diperlukan (bila ada). Dengan Hak Bebas Royalti Non-Eksklusif ini Perpustakaan UIN Sunan Ampel Surabaya berhak menyimpan, mengalih-media/format-kan, mengelolanya dalam bentuk pangkalan data (database), mendistribusikannya, dan menampilkan/mempublikasikannya di Internet atau media lain secara *fulltext* untuk kepentingan akademis tanpa perlu meminta ijin dari saya selama tetap mencantumkan nama saya sebagai penulis/pencipta dan atau penerbit yang bersangkutan.

Saya bersedia untuk menanggung secara pribadi, tanpa melibatkan pihak Perpustakaan UIN Sunan Ampel Surabaya, segala bentuk tuntutan hukum yang timbul atas pelanggaran Hak Cipta dalam karya ilmiah saya ini.

Demikian pernyataan ini yang saya buat dengan sebenarnya.

Surabaya, 12 Februari 2019

Penulis

(Nuril Imamah)

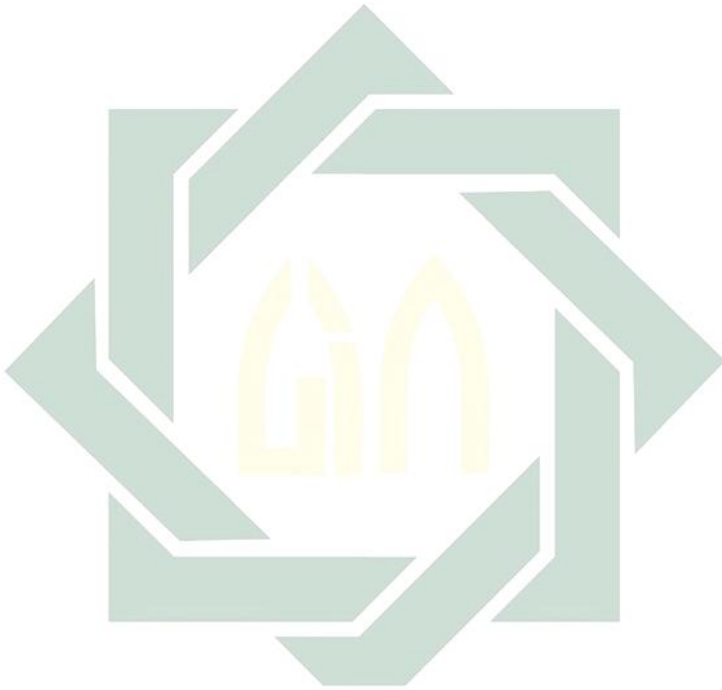
## ABSTRACT

Imamah, Nuril. (2019). *Teacher's Technology Integration Level for English Classroom Instruction at MAN 2 Gresik Jawa Timur*. A Thesis. English Teacher Education Department, Faculty of Education and Teacher Training, UIN Sunan Ampel Surabaya. Advisors: Rizka Safriyani, M.Pd and M. Syaifudin, M. Ed, Ph. D.

*Key words: Technology Category, Four English Skills, Technology Integration Level, SAMR Model.*

In recently decades, technology integration is being a part of English classroom instruction. It means the process of using technology as a media to support the English classroom instruction. Mostly the teacher integrated technology in making students understand the materials, such as preparing materials using Microsoft Word, explaining materials using Microsoft Power Point, etc. By integrating technology in the English classroom instruction, the role of the teacher-centered is changed to be student-centered. This study is aimed to know the technology categories integrated by the teacher and classify the teacher's technology integration level in the English classroom instruction. Descriptive qualitative is used to describe the result of this study. The data is collected through interview and observation at XII IPS 3, XII IPS 2, XII MIPA 2, and XII MIPA 4. It is focused on the teaching-learning four English skills, such as listening, reading, speaking, and writing. Based on the result of finding and discussion, it is found that the teacher integrated five technology categories which are *word processing, spreadsheet software, organizing and brainstorming, multimedia, and web resources*. The teacher integrated those technologies in teaching listening, reading and writing skill. However, the teacher always tries to practice students speaking skill by asking some questions related to the topic which is learned on that day. While the activities in the English classroom instruction is analysed based on SAMR model to know the teacher's technology integration level in integrating technology in the English classroom instruction. It is stands for *substitution, augmentation, modification, and redefinition*, which has *substitution* as the lowest level and *redefinition* as the highest level. The result shows that the teacher is on the augmentation level in teaching writing skill,

which the teacher uses *word processing* with additional functions like spell check, cut, and paste the documents. Therefore, the teacher is classified on passing the substitution level, because the teacher is on the augmentation level, which integrates technology as a direct tool substitute, with functional improvement.



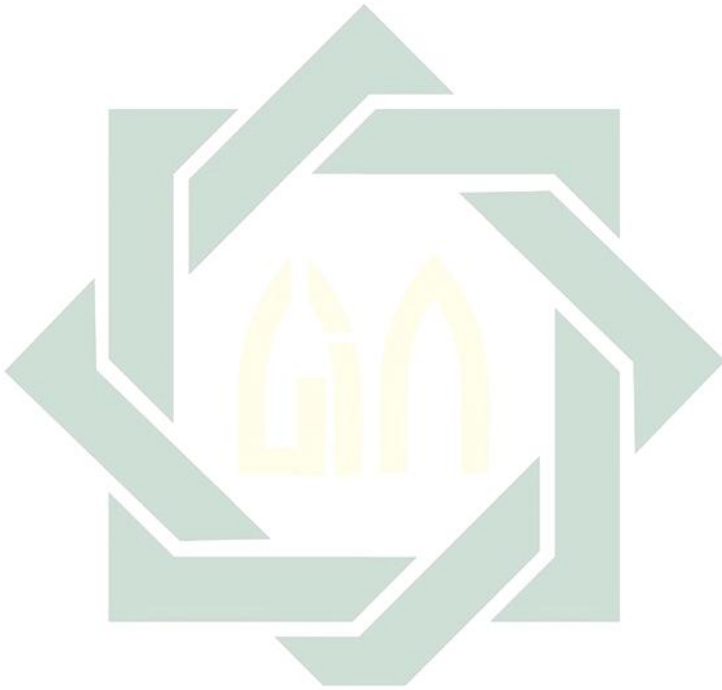
## ABSTRAK

Imamah, Nuril. (2019). *Level Teknologi Integrasi Guru untuk Proses Pembelajaran Bahasa Inggris di MAN 2 Gresik Jawa Timur*. Skripsi. Pendidikan Bahasa Inggris, Fakultas Ilmu Keguruan dan Tarbiyah, UIN Sunan Ampel Surabaya. Pembimbing: Rizka Safriyani, M.Pd and M. Syaifudin, M. Ed, Ph. D.

*Kata Kunci: Kategori Teknologi, Empat Kemampuan Berbahasa Inggris, Level Teknologi Integrasi, SAMR Model.*

Dalam dekade baru ini,, teknologi integrasi menjadi salah satu bagian dari proses belajar-mengajar. Ini berarti proses penggunaan teknologi sebagai salah satu media pendukung proses pembelajaran. Sebagian besar guru mengintegrasikan teknologi dalam membuat siswa memahami materi, seperti mempersiapkan materi dengan menggunakan Microsoft Word, menjelaskan materi menggunakan Microsoft Power Point, dan lai-lain. Dengan menggunakan teknologi dalam proses pembelajaran, peran yang terpusat pada guru berubah menjadi terpusat pada siswa. Penelitian ini bertujuan untuk mengetahui kategori technology yang digunakan oleh guru dan mengklasifikasi level teknologi integrasi guru dalam proses pembelajaran. Deskriptif kualitatif digunakan untuk mendeskripsikan hasil dari penelitian ini. Data dikumpulkan melalui wawancara dan observasi pada beberapa kelas, XII IPS 3, XII IPS 2, XII MIPA 2, dan XII MIPA 4. Ini difokuskan pada proses pembelajaran empat kemampuan berbahasa Inggris, seperti mendengarkan, membaca, berbicara, dan menulis. Berdasarkan hasil penemuan dan diskusi, ditemukan bahwa guru mengintegrasikan lima kategori technology yakni *word processing application, spreadsheet software, organizing and brainstorming, multimedia, dan web resources*. Sedangkan, akitivitas-aktivitas dalam proses pembelajaran dianalisis berdasarkan SAMR model untuk mengetahui level teknologi integrasi guru dalam mengintegrasikan teknologi di dalam proses pembelajaran. Ini merupakan singkatan dari *substitusi, augmentasi, modifikasi, dan redefinisi*, yang memiliki *substitusi* sebagai level terendah dan *redefinisi* sebagai level tertinggi. Hasil menunjukkan bahwa guru berada pada level *augmentasi* dalam mengajar kemampuan menulis, yang mana guru menggunakan *word processing* dengan penambahan fungsi seperti mengoreksi ejaan, memotong, dan menyalin

dokumen. Dengan demikian, guru diklasifikasikan telah melewati level substitusi, karena guru berada dalam level augmentasi, yang mengintegrasikan teknologi sebagai pengganti teknologi sebelumnya dengan penambahan fungsi.



## TABLE OF CONTENTS

TITLE SHEET.....	i
PERNYATAAN KEASLIAN TULISAN.....	ii
ADVISOR APPROVAL SHEET.....	iii
EXAMINER APPROVAL SHEET.....	iv
LEMBAR PUBLIKASI.....	v
ABSTRACT.....	vi
TABLE OF CONTENTS.....	x
LIST OF TABLES.....	xii
LIST OF FIGURES.....	xiii
LIST OF APPENDICES.....	xiv

### CHAPTER I: INTRODUCTION

A. Background of the Study.....	1
B. Research Question.....	5
C. Objectives of the Study.....	5
D. Significance of the Study.....	5
E. Scope and Limitation.....	6
F. Definition of Key Terms.....	6

### CHAPTER II: REVIEW OF RELATED LITERATURE

A. Review of Related Literature.....	8
1. English Classroom Instruction.....	8
2. Technology Integration.....	10
a. Types of Technology Integration.....	11
b. Integrating Technology for English Classroom Instruction .	13
1) Integrating Technology in the Teaching English Skills ..	13
2) Advantages and Disadvantages of Integrating Technology for English Classroom Instruction.....	15
3. The Teacher's Technology Integration Level.....	16
a. The SAMR Model Levels.....	17
b. The SAMR Model and Bloom's Digital Taxonomy.....	20
B. Previous Study.....	23

### **CHAPTER III: RESEARCH METHOD**

A. Research Design .....	26
B. Research Subject .....	26
C. Research Setting .....	27
D. Data and Source of Data.....	27
E. Data Collection Technique .....	27
F. Research Instrument .....	28
G. Data Analysis Technique .....	29

### **CHAPTER IV: RESEARCH FINDING AND DISCUSSION**

A. Research Finding .....	31
1. Technology Categories Integrated by the Teacher.....	31
2. The Teacher's Technology Integration Level.....	35
B. Discussion .....	43
1. Technology Category Integrated by the Teacher .....	44
2. The Teacher's Technology Integration Level.....	47

### **CHAPTER V: CONCLUSION AND SUGGESTION**

A. Conclusion.....	52
B. Suggestion .....	53

REFERENCES

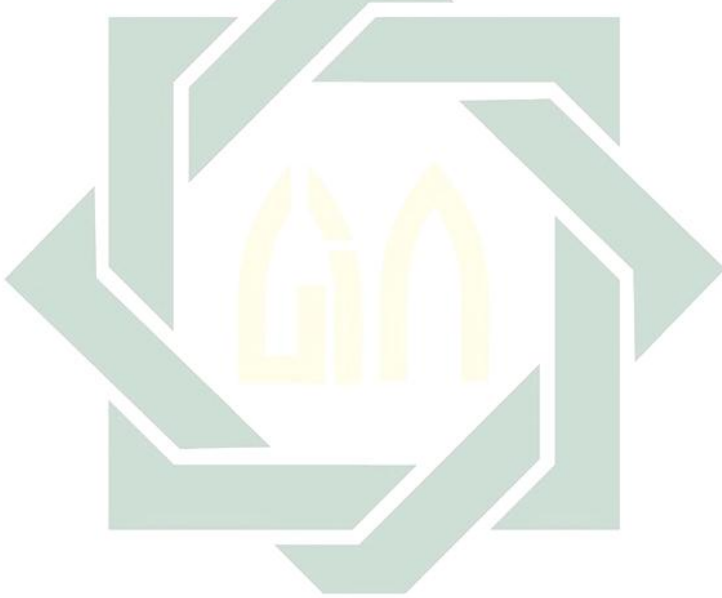
APPENDIX

## LIST OF TABLES

Table	Page
2.1 The Seven Categories of Technology	12
3.1 The SAMR Model Activities	19
3.2 SAMR Model Application	20
4.1 The Technology Categories Integrated at XII IPS 3	30
4.2 The Technology Categories Integrated at XII IPS 2	31
4.3 The Technology Categories Integrated at XII MIPA 2	32
4.4 The Technology Categories Integrated at XII MIPA 4	33
4.5 Teacher's Activities at XII IPS 3	35
4.6 Teacher's Activities at XII IPS 2	37
4.7 Teacher's Activities at XII MIPA 2	38
4.8 Teacher's Activities at XII MIPA 4	39
4.9 Teacher's Activities Based on SAMR Model	41
4.10 Technology Category Integrated by the Teacher	43
4.11 Teacher's Activities Based on SAMR Model	47

## LIST OF FIGURES

Figure	Page
3.1 The SAMR Model	17
3.2 The SAMR Model and Bloom's Digital Taxonomy	23
4.1 Chart of Teacher's Technology Integration Level of SAMR Model	42



## **LIST OF APPENDICES**

Appendix	Page
1 Interview Guidelines	56
2 Observation of Technology Integration	57
3 Observation Checklist of SAMR Model	58
4 Field Note of SAMR Model Activities	61
5 Interview Transcribe	62
6 Observation of Technology Integration at XII IPS	64
7 Observation of Technology Integration at XII IPS 2	65
8 Observation of Technology Integration at XII MIPA 2	66
9 Observation of Technology Integration at XII MIPA 4	67
10 Observation Checklist of SAMR Model at XII IPS 3	68
11 Observation Checklist of SAMR Model at XII IPS 2	69
12 Observation Checklist of SAMR Model at XII MIPA 2	70
13 Observation Checklist of SAMR Model at XII MIPA 4	71
14 Observation of Technology Integration by the Teacher	73
15 Observation Checklist of SAMR Model by the Teacher	74
16 Field Note of SAMR Model Activities at XII IPS 3	76
17 Field Note of SAMR Model Activities at XII IPS 2	77
18 Field Note of SAMR Model Activities at XII MIPA 2	78
19 Field Note of SAMR Model Activities at XII MIPA 4	79
20 Documentation	80
21 Surat Tugas	81
22 Surat Validasi Instrument	82
23 Surat Izin Penelitian	83
24 Surat Balasan Penelitian	84
25 Lembar Persetujuan Munaqosah Skripsi	85
26 Kartu Bimbingan	86

## CHAPTER I INTRODUCTION

This chapter describes the introduction to this study. It consists of background of the study, research questions, and objectives of the study, significance of this study, scope and limitation, and definition of key terms.

### A. Background of the Study

The term technology integration is often used by many people, especially in education. For some scholars, technology integration is understood and examined regarding types of teachers' computer use in the classroom, how teachers used technology to carry out familiar activities more reliably and productively, and how such use may be re-shaping these activities.<sup>1</sup> Another word, technology integration is making technologies an integral part of teaching and learning process that impacts resources, teacher and student roles, and instructional activities.<sup>2</sup> It can be concluded that technology integration is the process of using technology as a tool to support the English classroom instruction. Therefore, many schools integrated technology to facilitate the English classroom instruction.

As stated, that technology has been integrated into the school, the teacher should integrate it into their class. Previously, teachers taught in the traditional role which uses a whiteboard, printed books, etc. as media in English classroom instruction. Now it is changed by using a smart board, mobile phone, smartphones, computers, etc. It is not only about the tools, but also use some applications for getting information and attaching files. Moreover, integration technology helps teachers in managing the class. It can be seen when teachers deliver the material using presentation media,

---

<sup>1</sup> M. Semih Summak and Mustafa Samancioglu, "Technology Integration and Assessment in Education Settings", *Gaziantep, Turkey: Elsevier Ltd* (2010), p. 1726.

<sup>2</sup> Katherine S. Cennamo, John D. Ross, and Peggy A. Ertmer, *Technology Integration for Meaningful Classroom Use A Standards-Based Approach* (Wadsworth: Cengage Learning, 2010), p. 502.

students listen and pay attention to the teacher's explanation. Students can submit assignments on specific time through email, WhatsApp, etc. Besides, students will use technology as resources in getting information which is related to the lesson. Thus, technology should be integrated into the classroom to develop the English classroom instruction.

Successful technology integration is achieved when the use of technology is supporting the curriculum goals and helping students to effectively reach their goals. When effectively integrated into the curriculum, technology tools can extend learning in powerful ways. That's why teacher should match technology integration with the curriculum. The idea of integrating technology into the curriculum came about through a concern that they may have been teaching about and teaching how to use technology, but not addressing how students can apply technology related knowledge and skills. To address this problem, there was a move to integrate technology into each key learning area. This means that technology becomes an integral part of the learning experience and an important consideration for teachers, from the onset of preparing learning experiences through to teaching and learning with students.<sup>3</sup> In other words, technology can be said effectively integrated when technology really supported the English classroom instruction and reached the goal of teaching. The English classroom instruction is similar meaning of classroom instruction. In this type of classroom, teacher integrates technology into the English classroom instruction which all activities are supported by the use of technology. It is needed for the teacher to encourage students in improving their English skills. In the English classroom instruction usually, students are easily getting bored. The teacher solves this problem by facilitating students through the use of course books, audio-visual aids, and technology-based materials. Thus, the teacher integrates technology into the English classroom instruction to make students interested in the English classroom instruction and understand the materials. Based on a preliminary research which has been done by the researcher, this study will be conducted at MAN 2

---

<sup>3</sup> Michelle J. Eady and Lori Lockyer, *Tools for Learning: Technology and Teaching Strategies* (Paper presented at Learning to Teach in the Primary School Queensland University of Technology, Australia, 2015), p. 74.

Gresik. This school is one of the favorite schools in Gresik where there are two special programs. The first is a prodistic program from ITS Surabaya. The second program is an English club which is called Fun English Club. Besides, the English teachers teach students not only based on the book, but teachers teach in an interesting way by integrating technology into the English classroom instruction such as using online book, video, song, etc. When they explain the lesson and give instruction to students they used full English. The headmaster hopes that after graduating from this school students are able to use technology integration and English well.

The problem that has arisen is students have the difference ability between MIPA and IPS students. Based on the preliminary research it becomes an important problem for the teacher, especially in delivering the material. MIPA students are being able to understand easily rather than IPS students. It can be said that MIPA students have better an understanding than IPS students in English. Although there is a difference understanding in English, the teacher tries to make them have the same an understanding by integrating technology into the English classroom instruction, so the teacher will not differentiate the teaching strategies on both MIPA and IPS students. Regarding those considerations, this study will analyze the technology integration categories, which is used in the English English classroom instruction.

Considering technology integration into the classroom, the SAMR model is chosen to measure the level of teachers' technology integration. This model was developed by Dr. Ruben R. Puentedura in order to give a frame of reference to effective technology integration. SAMR is an acronym for substitution, augmentation, modification and redefinition. It is a tool for assessing and evaluating technology practices and impacts in classroom setting by looking into students, teachers and the changes.<sup>4</sup> Essentially, the SAMR model links how teachers use technology to the outcomes for students.<sup>5</sup> There are four levels of SAMR model, substitution is the

---

<sup>4</sup> Patrick Kihoza et al., "Classroom ICT integration in Tanzania: Opportunities and challenges from the perspective of TPACK and SAMR models" *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, Vol. 12, No. 1 (2016), p. 108.

<sup>5</sup> Joseph J. Park, "The Use of Professional Learning Networks and Technology Integration", Paper presented for the requirement for 61-683 (2014), p. 9.

lowest level in which technology acts as a tool substitute, with no functional change. The second level is augmentation in which technology acts as a direct tool substitute, with functional improvement. Substitution and augmentation level includes on the enhancement level. Move up to enhancement level, there is transformation level which includes modification level in which technology allows for significant redesign and redefinition level allows technology for the creation of new tasks previously inconceivable.<sup>6</sup> Kathy Schrock believed that “teachers should be planning for technology task, activities, and assessments that include both higher levels of Bloom’s Revised Taxonomy and the transformation area of SAMR model” as it is possible to have redefinition tasks that only target the remembering level or creative tasks and assessments that are at an augmentation stage.<sup>7</sup>

Regarding to that issue, there are some previous studies that have been conducted by some researchers. Alejandra Glanguilio Lobo and Rocio Lara Jimenez conducted a study entitled “*Evaluating Basic Grammar Projects, Using the SAMR Model*”. In this study, the researchers evaluated the project assigned in two basic grammar courses of the English teaching majors, at Universidad Nacional in Costa Rica using the SAMR for knowing learning activities that implemented information and communication technologies. Another study was conducted by Glenn P.Wood II, entitled “*Teachers’ Perception of the Impact of ipads Use in the Classroom on Their Instructional Practice*”. The researcher investigated the teachers’ perception of the impact that one, the ipad, can impact their instructional practice in the classroom by using SAMR model.

Based on those reasons which already explained above, this study is conducted to make differences from the previous study. This study will focus on the teacher's level of technology integration based on SAMR model in the English classroom instruction. Therefore, the teacher will be easier to know the

---

<sup>6</sup> Nicky Hockly, “Technology for the Language Teacher: Mobile Learning”, *ELT Journal*, vol. 67 (2013), p. 82.

<sup>7</sup> Michael Phillips, “‘Digital Technology Integration’. In Henderson, M. –Romeo, G. (Ed.). *Teaching and Digital Technologies: Big Issues and Critical Questions*”, *Melbourne: Cambridge University Press* (2015), p. 326.

appropriate technology integration within materials into English classroom instruction.

## **B. Research Question**

In relation to the background of the study above, this study is intended to examine the following questions:

1. What are the technology categories integrated by the teacher for English classroom instruction at 12<sup>th</sup> grade of MAN 2 Gresik?
2. What is the teacher's technology integration level for English classroom instruction at 12<sup>th</sup> grade of MAN 2 Gresik?

## **C. Objectives of the Study**

Considering the research questions stated, this study is aimed to find out:

- a. The technology categories integrated by the teacher for English classroom instruction at 12<sup>th</sup> grade of MAN 2 Gresik.
- b. The teacher's technology integration level for English classroom instruction at 12<sup>th</sup> grade of MAN 2 Gresik.

## **D. Significance of the Study**

This result of this study is expected to give contributions, such as:

1. For English Teacher

This research will help English teacher to know the level of technology integration that is used to teach students at any levels, especially in teaching Senior High School students. By knowing its level, the teacher will always develop technology integration as media in teaching learning English process. So, before teaching the teacher will prepare what technology integration which can be appropriated with the materials.

2. For Students

This research will make students interested in teaching learning English process, because the teacher uses technology integration as media during the lesson. Besides, the students can practice and increase their English skills.

3. For Other Researcher

This research can be as references for the next research to know the students' level in using technology integration.

## E. Scope and Limitation

The scope of this study is the teacher's technology integration in the English classroom instruction at 12<sup>th</sup> grade of MAN 2 Gresik. This study explains the level of technology integration that is used by the teacher. It means that this study only focuses on the teacher's level on using technology integration in teaching English classroom instruction. While, this study gives limitation on integrating technology in teaching four English skills, reading, writing, speaking, and listening. Then, the SAMR Model is used to assess the teacher's technology integration levels in the English classroom instruction.

## F. Definition of Key Terms

### 1. English Classroom Instruction

The term instruction means education, which refers to the teaching and learning of knowledge, skills, and attitudes. According to Cuban classroom instruction defines as model stretching from a teacher-centered to student-centered.<sup>8</sup> In this study, English classroom instruction refers to the process of integrating technology in the English teaching-learning process at 12<sup>th</sup> grade of MAN 2 Gresik.

### 2. Technology Integration

Technology integration is using computers effectively and efficiently in the general content areas to allow students to learn how to apply computer skills in meaningful ways.<sup>9</sup> In this study, technology integration means technology that is used by the teacher in English classroom instruction.

### 3. Teacher's Technology Integration Level

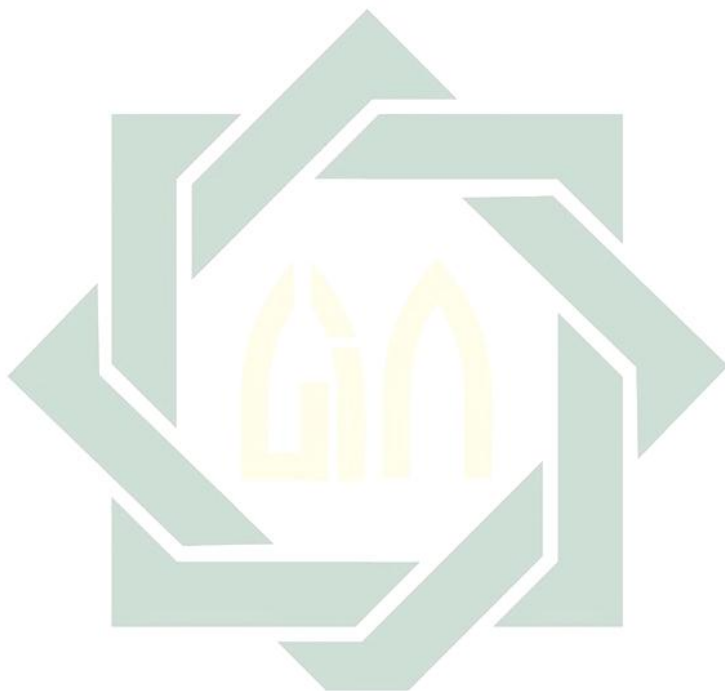
In this study, the teacher's technology integration level means the teacher's level of integrating technology in the English classroom instruction. Thus, to know the teacher's integration level the researcher used the SAMR Model. It was developed by Ruben Puentedura on 2006. It stands for Substitution, Augmentation, Modification, and Redefinition, is a tool for

---

<sup>8</sup> Anju Relan, - Gillani B. J. "Web Based Instruction and the Traditional Classroom: Similarities and Differences". In khan, B (Ed.). *Web -Based Instruction* (New Jersey: Educational Technology Publications, 1997), 25.

<sup>9</sup> Joeline Dokstader, "Teachers of the 21<sup>st</sup> century know the what, why, and how of technology integration" *T.H.E Journal*. Vol. 26 Issue 6, 1999, 73.

assessing and evaluating technology practices and impacts in classroom setting by looking into students, teachers and the changes.<sup>10</sup> By using this model the researcher assessed and identified the teacher's technology integration level in the English classroom instruction.



---

<sup>10</sup> Patrick Kihoza, et al., "Classroom ICT integration in Tanzania: Opportunities and challenges from the perspective of TPACK and SAMR models" *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*. Vol. 12, Issue 1, 2016, 108.

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

In this chapter, the researcher discusses the theories related to the problems. To be more specific, this review of related literature discusses about the definition of classroom instruction, definition of technology integration, types of technology integration, integrating technology for English classroom instruction, advantages and disadvantages of integrating for English classroom instruction, and SAMR model.

#### **A. Review of Related Literature**

##### **1. English Classroom Instruction**

The term instruction means education, which refers to the teaching and learning of knowledge, skills, and attitudes. According to Cuban classroom instruction defines as model stretching from a teacher-centered to student-centered.<sup>11</sup> It can be defined classroom instruction is the English classroom instruction which is changing the role of teacher-centred to be student-centered by the use of technology. There are some types of instruction which can be used by the teacher in the teaching and learning process, as follow:

##### **a. Direct Instruction**

The Direct instruction strategy is highly teacher-directed and is effective for providing information or developing step-by-step skills. It also works well for introducing other teaching methods, or actively involving students in knowledge construction. In examples: Lecture, Slide Presentation, Explicit Teaching, Drill and Practice, Didactic Questions, Demonstrations, Guided and Shared (reading, listening, viewing, thinking), Guest Lecture, Video, Multimedia Presentation. Interactive Instruction

##### **b. Interactive instruction**

Interactive instruction is a strategy which related on discussion and sharing among participants. It is important for

---

<sup>11</sup> Anju Relan, - Gillani B. J. "Web Based Instruction and the Traditional Classroom: Similarities and Differences". In khan, B (Ed.). *Web –Based Instruction* (New Jersey: Educational Technology Publications, 1997), 25.

the teacher to outline the topic, the amount of discussion time, the composition and size of the groups, and reporting or sharing techniques. Students can learn from peers and teachers to develop social skills and abilities, to organize their thoughts, and to develop rational arguments. It requires the refinement of observation, listening, interpersonal, and intervention skills and abilities by both teacher and students. In examples: Debates, Role Playing, Panels, Brainstorming, Peer Partner Learning, Peer Assessment, Discussion, Laboratory Groups, Labs, Think/Pair/Share, Co-operative Learning, Jigsaw, Problem Solving, Tutorials, Interviewing, Conferencing, Team-Based Learning, Seminars.

c. Indirect Instruction

Indirect instruction is mainly student-centred, which seeks a high level of student involvement in observing, investigating, drawing inferences from data, or forming hypotheses. In indirect instruction, the role of the teacher shifts from lecturer/director to that of facilitator, supporter, and resource person. In examples: Problem Solving, Case Studies, Reading, Inquiry, Reflective Discussion, Writing, Concept Formation, Concept Mapping, Tutorials.

d. Independent Study

Independent study refers to the range of instructional methods which are purposefully provided to foster the development of individual student initiative, self-reliance, and self-improvement. While independent study may be initiated by student or teacher, the focus here will be on planned independent study by students under the guidance or supervision of a classroom teacher. In addition, independent study can include learning in partnership with another individual or as part of a small group. In examples: Essays, Computer Aided Instruction, Journals, Learning Logs, Reports, Learning Contracts, Homework, Research Projects, Assigned Questions, Learning Centres, Independent Project/Course, Self-Assessment

e. Experiential Learning

Experiential learning is inductive, learner-centred, and activity oriented. Personalized reflection about an experience and the formulation of plans to apply learning to

other contexts are critical factors in effective experiential learning. The emphasis in experiential learning is on the process of learning and not on the product. In examples: Field Trips, Narratives, Conducting Experiments, Simulations, Games, Storytelling, Field Observations, Role-Playing, Model Building, Surveys, Studio Labs, Community Engaged Learning, Study Abroad, Community Service Learning, Undergraduate Research, Internships, Practicum, Co-op Placement, Apprenticeship, Field Courses.<sup>12</sup>

Those are some instructional strategies which commonly used in the English classroom instruction. English classroom instruction is English English classroom instruction which is supported by some activities and the use of technology in improving students' English skills. In this study, the researcher defines English classroom instruction as the process of integrating technology into the English teaching learning process at 12<sup>th</sup> grade of MAN 2 Gresik.

## 2. Technology Integration

Discussing technology in English classroom instruction, the word 'integration' is often used. The word technology and technology integration actually have similar meaning, but many people confused to define those words. Technology is synonymous with computer equipment, software, and other electronic devices, while technology integration means having and using this equipment in the classroom. Griffin defined technology integration as, purposeful use of instructional technology in the development and methodology of curriculum delivery. Technology integration is the incorporation of the technology and technology-based practices (collaborative work and communication, Internet-based research, etc.) into daily routines, work and management of schools.<sup>13</sup> Other defines technology integration is making technologies an integral part of the teaching and learning process that impacts resources, teacher and student roles, and instructional activities.<sup>14</sup> By knowing those

<sup>12</sup> *Inservice\_topics\_instructional\_strategies\_online\_mlhs*, (<http://www.minnesotanls.org>, accessed on 23 July 2018).

<sup>13</sup> M. Semih Summak, - Mustafa Samancioglu. (Eds), *Technology Integration...* 1726.

<sup>14</sup> Katherine S. Cennamo, et.al., *Technology Integration ...* 502.

definitions, technology is defined as being a part of the English classroom instruction which helps the teacher to support student learning.

According to Prothoroe, effective technology integration does not mean using technology to teach the same content in the same way, instead to use technology for providing opportunities to support new models of learning, including opportunities for students to collaborate and construct knowledge.<sup>15</sup> In order to create new kinds of learning experiences, effective technology integration requires more than simply introducing computers and related technologies into the classroom. To integrate means to combine two or more things to make a whole, when teachers integrate technologies into instruction, they make technologies an integral part of the teaching and learning process. Technology integration requires changes to many instructional including 1) what resources are used; 2) what roles the teacher performs; 3) what students play; 4) the nature of the instructional activities.<sup>16</sup>

#### **a. Types of Technology Integration**

Technology integration for education has evolved at a rapid pace and the only constant element regarding its presence in the classroom is change at warp speed. Moreover technology integration for increasing both student engagement and achievement evolved from the desktop to the laptop, from the portable laptop to the notebook, and to the tablet and even the use of smartphones in classroom.<sup>17</sup> Technology can impact on the English classroom instruction, the better technology which used will increase students engagement and achievement. Thus, the teacher should choose the appropriate technology within the materials. There are seven categories which can be used in the English classroom instruction as follow<sup>18</sup>:

<sup>15</sup> M. Semih Summak, - Mustafa Samancioglu. (Eds), *Technology Integration...* 1726.

<sup>16</sup> Katherine S. Cennamo, et.al., *Technology Integration...* 17.

<sup>17</sup> Jaclyn M. Swayne, Doctoral Disertation: "*Staying Connected: Measuring the Impact of Technology Integration on Student Engagement and Achievement at the Middle Level*" (Portland: Concordia University, 2017), 15.

<sup>18</sup> Howard Pitler, et.al., *Using Technology With Classroom Instruction That Works* (United States: Library of Congress Cataloging, 2007), 12.

Table 2.1: The Seven Categories of Technology

<b>The Seven Categories of Technology</b>		
<b>Technology Category</b>	<b>Definition</b>	<b>Example</b>
Word processing applications	Software that enables the user to type and manipulate text	Microsoft Word, Open Office.org Writer, Google Docs, MY Access!
Spread sheet software	Software that enables the user to type and manipulate numbers	Microsoft Excel, OpenOffice.org Calc, Inspire Data, Google Spread sheets
Organizing and brainstorming software	Software that enables the user to create idea maps, KWHL charts, and category maps	Inspiration, Kidspiration, Brain Storm, SMART Ideas, Visual Mind
Multimedia	Software that enables the user to create or access visual images, text, and sound in one product	iMovie, Microsoft Movie Maker, Adobe Photoshop, Microsoft Power Point, Kid Pix Studio, Keynote, Open Office.org, Impress
Data collection tools	Hardware and software that enable the user to gather data	Probe ware, USB microscopes, classroom response systems
Web resources	Resources available on the Web that enable the user to gather information or apply or practice a concept	Virtual tours, information, applets, movies, pictures, simulations
Communication software	Software that enables the user to communicate a text, presentation, voice, or a combination of the three	Blogs, e-mail, VoIP, podcasts, wikis

This study use some categories of technology to identify technology integration which used by the teacher in the English classroom instruction.

## **b. Integrating Technology for English Classroom Instruction**

### **1) Integrating Technology in the Teaching English Skills**

#### **a) Listening Skill**

Listening skill is one of the skills in English that should be mastered by students. Listening involves understanding accent, pronunciation, intonation, meaning of words and the meaning of speaking. By listening, students can understand what the teacher said and explained. Usually, when the teacher explains the lesson, students do not pay attention to the teacher's explanation. It makes students misunderstanding within the lesson. In solving this problem the teacher integrates technology in order to make students interested in listening to the teacher's explanation.

Multimedia is an important one that should be integrated for students' listening skills. Multimedia technologies such as audio, video, and animation are becoming common place and becoming a potential tool for listening. With the use of tools such as, computer, radio, audiotape, podcasts, tape recorders, iPods, and videos in the English teaching-learning, students can comprehend intonation and learn the pronunciation of words which used by native speakers.<sup>19</sup> Therefore, students' listening skill and self-confidence can increase by integrating technology in the teaching listening skill.

#### **b) Reading Skill**

Reading is one of the difficult skills in English. Some students dislike reading because many difficult vocabularies on the text and students need to know the meaning in order to understand the meaning of the sentences. Reading becomes easier when the teacher integrates technology such as using electronic dictionary and gloss to find and translate the difficult words, browsing the internet to get more information about the text, using multimedia software, using reading-based computer programs. On the other hand, websites that teach English make reading

---

<sup>19</sup> Selim Gunuc, - Nuri Babacan, "Technology Integration in English Language Teaching and Learning" *The Journal of Teaching English for Specific and Academic Purposes*. Vol. 5 No. 2, Turkey 2017, 353.

activities as enjoyable as much as possible and offer the opportunity to interact with vocabulary learning. Students have become understand concepts and relate concepts with help of English materials, containing storytelling or animation.<sup>20</sup> Therefore, integrating technology in the teaching reading skill gives many contributions to improve students' reading skill.

### **c) Speaking Skill**

Speaking as a productive skill that should be mastered by students, but in the fact, it can be seen as an important problem when learning English. Speaking skill can be improved when teacher integrated technology in the English classroom instruction because without speaking students cannot ask what they do not understand their problems. Bachate stated language laboratories are influencing students' communication skills and speaking skill positively. There are some tools which can improve students' speaking skill such as, Internet voice chat, speech synthesis program, and artificial intelligence computer programs. In addition, web-based storytelling enhances student motivation, promotes creativity and imagination, and provides students with more opportunities to practice speaking.<sup>21</sup>

### **d) Writing Skill**

In integrating technology in the English classroom instruction, teaching writing skill is also an important one to improve writing skill. It can be said that technology has encouraged and supported student's writing skills in terms of quality, and encouraged students to write. There are some technologies which can support writing skill, for example, using Wikis students' grammar can be corrected, blogs, e-mail, e-portfolio, and social networking activities like Facebook, Twitter, etc. By integrating technology in writing skill students having many friends in social media and they communicate with each other in order to share their knowledge.

---

<sup>20</sup> Selim Gunuc, - Nuri Babacan, "Technology Integration in English .... 354.

<sup>21</sup> Selim Gunuc, - Nuri Babacan, "Technology Integration in English .... 354.

## **2) Advantages and Disadvantages of Integrating Technology for English Classroom Instruction**

In integrating technology in the classroom there are some advantages and disadvantages as follow:

### **a) Advantages of Integrating Technology for English Classroom Instruction**

By integrating technology into the classroom, the teacher gets ready in the teaching process because they prepare material well before starting the lesson. For example, teachers use word processing or multimedia presentation when delivering the material and add some charts, pictures, etc. in increasing the writing process. It will make the teacher assess students easily by creating a rubric, reflections paper, checklist or other tools for the result students engagement and achievement will increase. Applied effectively, technology integration not only increases student learning, understanding, and achievement, but also augments motivation to learn, encourages collaborative learning, and supports the development of critical thinking and problem-solving skills.<sup>22</sup> Therefore, integrating technology into the classroom gives positive effects on both to teachers and students.

### **b) Disadvantages of Integrating Technology in the Classroom**

Although there are some advantages of integrating technology in the classroom, the fact that there are some disadvantages of integrating technology in the classroom. The teacher did not competent in using technology, it makes teacher always teaches in the traditional way which based on the text books. It becomes serious problem in the English classroom instruction because they lack training on integrating technology as media in the English classroom instruction. Mohamed stated that teachers insufficient experience technology, a lack of confidence and a lack of facilities. Moreover, preparing materials is time-consuming and often teachers are not available.<sup>23</sup> Thus, training of

<sup>22</sup> Howard Pitler, et.al., *Using Technology...* 3.

<sup>23</sup> Montse Morera Traisierra, Final Degree Project: *"The Use of Technology ...* 13.

technology for the teacher should be taken at the first problem in integrating technology.

In addition, the computer needs maintenance, the lack of maintenance causes computers to break and stop working. Pourshine mentioned that the lack of technical assistance in schools to repair computers and internet connections to continue using technology in schools is another problem.<sup>24</sup> Although there are some disadvantages of integrating technology in the classroom, despite the fact that the English classroom instruction is supported by technology integration that is used by the teacher.

### 3. The Teacher's Technology Integration Level

To help the teacher in using technology in the classroom, Ruben Puentedura developed SAMR Model as a framework for assessing the use of technology and determining the level of technology integration in the classrooms.<sup>25</sup> The SAMR model stands for four levels: Substitution, Augmentation, Modification, and Redefinition. This model delimited the context of technology integration to reveal specific classification levels of curriculum designs that were demonstrated, documented, or described as enhancing or transformative learning. It represented a means of moving teachers and students through the various degrees of technology integration for teaching and learning<sup>26</sup> from the simplest (substitution) to the more complex and innovative ones (redefinition). This model sees Substitution and Augmentation as ways to enhance learning tasks, whereas Modification and Redefinition allow for transformation. The following chart defines the SAMR model:

---

<sup>24</sup> Montse Morera Traisierra, Final Degree Project: "*The Use of Technology ...* 13.

<sup>25</sup> Flora Debora – Willy A. Renandya, "Transforming the Teaching of Listening and Reading Using The SAMR Model" *Using Technology*. Vol. 26, Issue 4, 42.

<sup>26</sup> Carolyn Anne Beisel, Doctoral Dissertation: "New or Novice Teacher Integration of Mobile Learning Instruction" (Walden: Walden University, 2017), 15.

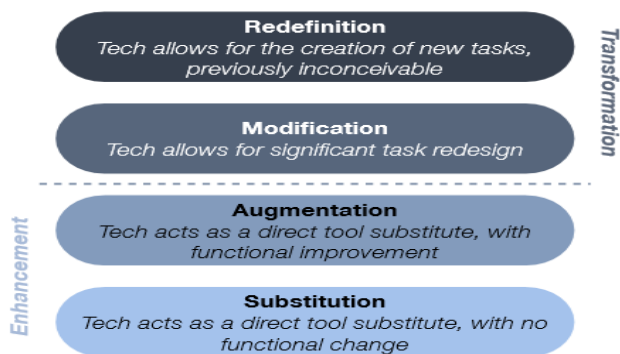


Figure 3.1: The SAMR Model  
(<https://www.learningarchitects.com>, accessed on March 29, 2018)

#### a. The SAMR Model Levels

##### 1) Substitution Level

At the substitution level, technology acts as a direct tool substitute, with no functional improvement. Puentedura stated that technology could be used as direct tool of substitution to the traditional forms of teaching and learning.<sup>27</sup> It means there is no functional improvement just changing previous tools as media of teaching learning. Therefore, the substitution level defines the lowest level of SAMR model where technology is used to only substitute another tool without changing. The technology is used as a means to enhance English classroom instruction.<sup>28</sup>

##### 2) Augmentation Level

At the augmentation level, technology acts as a direct tool substitute, with functional improvement. Different from the substitution level, augmentation level used technology as direct substitution tool to enhance learning in either online or offline learning

<sup>27</sup> Carolyn Anne Beisel, Doctoral Dissertation: "New or Novice Teacher Integration of Mobile Learning Instruction"... 17.

<sup>28</sup> Elizabeth H. Andrew, Doctoral Dissertation: "Teacher Pedagogy to Develop Student Writing Through the Integration of text-To-Speech Technology", (Flinders University, 2016), 12.

environments.at this level technology improves learning or provides added functional improvement.<sup>29</sup>

### 3) **Modification Level**

At this level, technology is modifying or significantly redesigning learning activities. This is exemplified by using digital communication and technological tools. Digital communication encourages collaboration and analytical thinking, while technological tools can facilitate student engagement in the process of learning.<sup>30</sup>

### 4) **Redefinition Level**

At the redefinition level, technology enables students to participate and collaborate in their learning as experts, but with the added skill of communicating with purpose for a variety of audiences. The technology use at this level has a transformational effect on learning because it promotes the creation of learning tasks.<sup>31</sup> It is the highest level of SAMR model.

---

<sup>29</sup> Elizabeth H. Andrew, Doctoral Dissertation: “*Teacher Pedagogy to Develop Student Writing Through the Integration of text-To-Speech Technology*”, 12.

<sup>30</sup> Elizabeth H. Andrew, Doctoral Dissertation: “*Teacher Pedagogy*... 13


<sup>31</sup> Elizabeth H. Andrew, Doctoral Dissertation: “*Teacher Pedagogy* ... 13.

Table 3.1: The SAMR Model Activities

TASK	SUBSTITUTION	AUGMENTATION	MODIFICATION	REDEFINITION
	Technology acts as a direct tool substitute, with no functional improvement	Technology acts as a direct tool substitute, with functional improvement	Technology use allows for significant redesign of learning experiences.	Technology use allows for the creation of new learning experiences, made possible by current technology (previously not possible).
Writing	Word processor used as a typewriter	Word processing with additional functions like spell check, cut and paste, online submission	Word processing with integrated visual additions such as charts, tables, graphs, photos	Word processing with visual additions constructed via collaboration, revised with peer editing and/or posted online to incorporate an authentic audience
Reading	Reading text online or digital texts	Reading text online includes links to dictionary definitions of words, websites with additional information	Reading text online includes textual, visual, and audio tools such as clicking words to see visual depictions or hear pronunciations to help students understand the text	Reading text online includes textual, visual, and audio tools such as speech capabilities, animations, etc. to help students understand the text
Speaking	Practicing speaking task use voice/video recorder	Google Translator App is used for looking up correct pronunciation words when doing speaking practice	Making voice/video recording of a speaking task done in class to share with partner for reflection and repair beyond class	The class has a conversation or interview with a native speaker via Skype or Google Talk
Listening	Listening to online dialogues by using computer speakers/headphones provide in language laboratory	Students are allowed to check the online transcripts available or check online dictionaries to get more understanding	Asking students to record and edit their reading. The final edited version is uploaded and shared to the class to get feedback.	Asking students to collaboratively produce digital video, getting online feedback, using an online LMS platform, publishing students' work for a worldwide audience, and adding a social media element such as YouTube channel
Annotating Documents	Open PDF from an email to read the document	Dictionary/search document	Annotating digital documents in GoodReader and iBooks	Creating an interactive document using iBooks author
Researching	Using a web browser to search for and collect information on the internet	Using a web browser to search for and collect information on the internet and to bookmark them for future reference	Using a web browser to search for and collect on the internet and to bookmark, annotate, and compare and contrast them	Using a web browser to search for and collect information on the internet and to bookmark, annotate, compare and contrast them and ultimately share the links and a criticism of them
Presenting	Creating a presentation using a presentation tool	Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Creating a presentation with visuals and audio as part of a mixed multimedia presentation	Creating a presentation with visuals and audio that features collaboration, interactive audience participation, is shared online to an authentic audience, is presented to a live virtual audience, etc.

(Adapted from District 220 SAMR Activity Scale for Technology Opportunities on [www.bsd220tech.blogspot.se](http://www.bsd220tech.blogspot.se) and Transforming the Teaching of Listening and Reading Using the SAMR Model by Flora Debora Floris, and Willy A. Renandya)

Table 3.2 SAMR Model Application



SAMR LEVEL	APPLICATION
Substitution	Microsoft Word, Microsoft PowerPoint, Microsoft Paint, Pages, iBooks, Symbaloo, Popplet, Simplemind, College Creator, Bamboo Paper, Jumbo Calculator, Dictionary, Wikipedia, Notes
Augmentation	Google Doc, Prezi, Word Clouding, Educreations, Google Form, Adobe Acrobat Reader, Twitter, Path, Blogger, English Grammar, Evernote
Modification	Mindmeister, Skype, Canva, Edpuzzle, Keynote, Live Binders, Edmodo, Survey Monkey, Flipboard, Skitch, Comic Strip, QR Code Reader, Dragon Dictation, PDF Expert
Redefinition	Adobe, Spark, Nearpod, Padle, Scratch, Flipgrid, Windows Moviemaker, ClassDoo, Google Hangouts, Kahoot, Plickers, Quizlet, YouTube, Storybird

(Adapted from Apps classified by SAMR Model on [www.appsineducation.blogspot.com](http://www.appsineducation.blogspot.com))

#### b. The SAMR Model and Bloom's Digital Taxonomy

The level of SAMR Model has connection within Bloom's Digital Taxonomy, which is developed by Benjamin Bloom. Benjamin Bloom's Taxonomy of Educational Objectives can help teachers classify their objectives to determine the various challenges of students' learning in using technology which based on targets a higher-order cognitive skill level. There are six levels from the highest level to the lowest level as follows creating, evaluating, analysing, applying, understanding, and remembering. Here's how technology fits into the domains of Bloom's taxonomy.<sup>32</sup>

<sup>32</sup> Boni Hamilton, *Integrating Technology in the Classroom Tools to Meet the Needs of Every Student* (USA: ISTE, 2015), 18-19.

- 1) The knowledge level or remembering. The lowest level of the taxonomy remembering refers to recalling, listing, describing, locating, recognizing, or naming. Many of these tasks involve memorization and show basic knowledge. In technology use, tasks at the remembering level might include conducting simple online searches, making an acrostic or bulleted list, writing facts, or listing main events. This level includes on the substitution level of SAMR model as the lowest level.
- 2) The comprehension level or understanding. One step up from remembering come understanding. At this level, students explain, compare, discuss, interpret, restate, summarize, sort, and infer. Technology tasks that demonstrate understanding include conducting an advanced Boolean search, drawing picture or event, making flow chart of events in a story or history lesson, outlining or summarizing a text, sorting into a Venn diagram, journaling, or commenting on a blog. This level includes on the augmentation level of SAMR model.
- 3) The application level or applying. Tasks in the application level require students to apply what they understand to new situations. Applying refers to solving, using, illustrating, constructing, classifying, and examining. Students working at this level may be solving problem on a math site, taking or selecting pictures to illustrate a concept, editing written work, developing a plan, uploading documents to a wiki, interviewing with a digital recorder, making a pattern, building a presentation, or contacting an expert. It is including on augmentation and modification level of SAMR model.
- 4) The analysis level or analysing. With analysis, students begin to use critical thinking skills to understand concepts. Verbs that fit into the analysis level include compare/contrast, investigate, organize, plan, structure, link, and deconstruct. Students working at this level with technology tools may be writing and advertisement, creating a Venn diagram on a subject of study, researching a concept, building a concept map, developing a questionnaire, writing a blog, conducting a survey, or

developing spread sheet. This level includes on the modification of SAMR model.

- 5) The evaluation level or evaluating. In evaluation, students use higher-level thinking skills to appraise ideas or materials based on criteria. Students might decide, choose, justify, debate, recommend, rate, or prioritize at this level. In the past, when students conducted research in library books, the materials had already been vetted, so while the information might not be current, its source could be trusted. With online research, however students must appraise the credibility of source before using it. Other technology-based tasks also require evaluation skills, such as writing a persuasive argument, engaging in an online discussion group, narrowing a search to target results, or critiquing books on a book review site. It includes modification and redefinition level of SAMR model.
- 6) The synthesis level or creating. Creating, the highest level on Bloom's taxonomy, describes what happens when students use their knowledge to create or produce something new. When students engage in creating, they are active learners who make choices about how demonstrate what they know. At this level, students create, compose, invent, predict, design, or propose. With technology, students might create a public service announcement video, compose and perform a musical composition, change a current song or poem with new rhythms or words, design a logo or book cover, collaborate on a discussion board or wiki, write and record a podcast, or propose an invention. At this level, what students produce generally has significance to them. In other words, this level includes on the redefinition level of SAMR model.

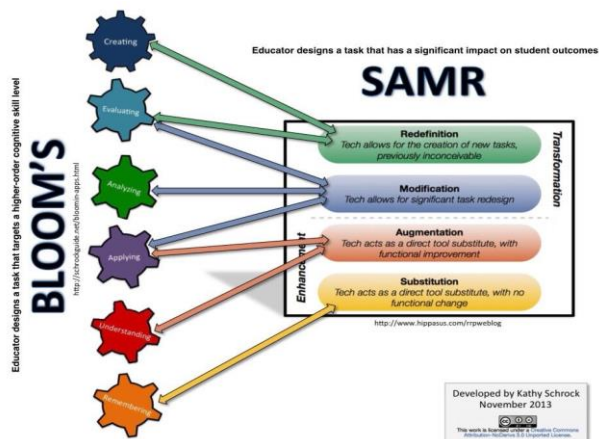


Figure 3.2: The SAMR Model and Bloom's Digital Taxonomy  
<http://www.schrockguide.net/uploads/3/9/2/2/392267/8080832.jpg?841>,  
 accessed on March 29, 2018)

Related the technology integration level used in classroom, the researcher used SAMR model to assess and identify the teacher's technology integration levels in the English classroom instruction.

## B. Previous Study

Related to this study, several previous studies are conducted. The first study was conducted by Juraj Stefanic, which has the title *"ipad in English Language Classes"*. This study focused on the difference between teaching process with usage of ipads or without it. It was to know whether the use of ipads is effective or not. In order to measure the usage of ipads, the researcher used the SAMR model and TPACK model as its frameworks to evaluate the level of integration technology to education. He found that the usage of ipads was effective and it was proven by showing the redefinition level of task which has been given to the students of English classes.

The second study was conducted by Glenn P.Wood II, which has the title *"Teachers' Perception of the Impact of ipads Use in the Classroom on Their Instructional Practice"*. The researcher investigated teachers' perception of the impact that one, the ipad, can impact their instructional practice in the classroom. He used the SAMR model as a framework for measuring the integration levels of

technology in the classroom. The finding of the study indicated a very high frequency and variation of ipad use by teachers and students, with the majority of teachers and students using the device every day, mostly in the SAMR categories of substitution and augmentation level.

The third study was done by Alejandra Glanguilio Lobo and Rocio Lara Jimenez, which has the title "*Evaluating Basic Grammar Projects, Using the SAMR Model*". In this study, the researchers evaluated the project assigned in two basic grammar courses of the English teaching majors, at Universidad Nacional in Costa Rica using the SAMR for knowing learning activities that implemented information and communication technologies. In finding result, they found a positive experience to complement the course with activities that made use of technology in the learning and understanding of the grammatical structure studied in class, to enhance their knowledge in a way different from had been the norm in previous years. They note that the SAMR model can be used for any subjects or topic, not only for language learning or grammar.

The next study entitled "*The SAMR Model as a Framework for evaluating mLearning*" was conducted by Danae Romrell, Lisa C. Kidder, and Emma Wood. This study examined some factors that influence the implementation of mobile devices within educational context. It focused on how mobile devices can be used to improve learning. The SAMR model also used to find the level of implementation mLearning in English classes. This study provided the greatest chance of designing activities that fall at the highest levels of the SAMR framework. The mLearning activities that modify or redefine traditional learning activities have the potential for transforming learning the use of a mobile device.

Another study entitled "*The Effects of Structured Professional Development on Intermediate Classroom Technology Integration*" was conducted by Ashley May. The aim of this study was to determine how a structured professional development program would impact classroom technology integration. It was taken place on an intermediate school campus in southwest Houston, Texas over the course of one year. The SAMR model is used to evaluate students' activities in the course. As a result, this study concluded that structured and focused professional development had a moderate impact on classroom integration. It also found a

surprising correlation between years of experience and teacher's self-perception of the strengths and weaknesses in classroom technology integration.

The study entitled "*Adoption of the SAMR Model to Assess ICT Pedagogical Adoption: A Case of Makerere University*" was done by Lubega T. Jude, Mugisha Annet Kajura, and Muyinda Paul Birevu is also support this study. It is to know the level of ICT in the English classroom instruction. A mix method approach is used in this study, it was undertaken to find out the actual causes of slow pedagogical integration. The result of this study revealed that non-use of a number of ICTs in pedagogical processes in institutions is caused mainly by: lack of a strong and vibrant unit that can push for implementation of educational technologies, lack of knowledge on how to use the ICTs in question, non-availability of relevant ICT infrastructure, and the lacklustre implementation of educational technologies policies.

The last study was conducted by Geraldine Chell and Sean Dowling entitled "*Substitution to Redefinition: The Challenges of Using Technology*". This study discussed the iPads apps and the implementations in the classroom. Those implementations are measured based on SAMR model. The findings of this study showed that there are some activities of using iPads in each level of SAMR model. This study is taken just one semester, it will found many more activities if it take long time.

In general, the first, second, third and seventh previous study have similar topic which focused on the use of i-Pads and its implementation in the English classes, while the present research did not. The third research was focusing on evaluating basic grammar projects. Then, the fourth research discussed about the implementation of m-Learning which is measured by SAMR model. While the sixth and this study has similarity on the SAMR model activities in the English classroom instruction, but the sixth study was conducted on the university. Moreover, this study focused on the use of technology integration which had been used by teacher, where all of activities which is evaluated by SAMR model in the English classroom instruction at 12<sup>th</sup> grade of senior high school. This study was taken under consideration that teachers need to know their level on using technology integration in the English classroom instruction.

## CHAPTER III RESEARCH METHOD

In this chapter, the researcher orderly discusses the methodology of the study starts from the beginning until the end. It contains research design, research location, data and source of data, research instrument, and data analysis technique. In detail explanation, the researcher presents the following section.

### A. Research Design

In conducting the study, the researcher used qualitative research to answer the research question which is related to the English classroom instruction. Qualitative research is concerned with qualitative phenomenon, i.e., phenomena relating to or involving quality or kind.<sup>33</sup> This method is appropriate to identify and describe a problem in which the researcher directly observes and records notes on people in a natural setting for an extended period.<sup>34</sup>

Additionally, the researcher used descriptive research in order to explain the result finding easily. *Descriptive research* includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at present.<sup>35</sup> In this study, the researcher assessed the technology integration which used in the English classroom instruction and the teacher's technology integration levels in the English classroom instruction. Therefore, the researcher used descriptive-qualitative method to identify and describe the result of this study.

### B. Research Subject

There are four English teachers at MAN 2 Gresik, based on the recommendation of the headmaster the researcher only focuses on one English teacher who teach in XII grade. Therefore, the researcher observed the teacher in integrating technology in the

---

<sup>33</sup> C.R. Kothari, *Research Methodology Methods and Techniques (Second Revised Edition)*. (Jaipur: New Age International (P) Limited, 2004), 3.

<sup>34</sup> W. Lawrence Neuman *Social Research Methods: Qualitative and Quantitative Approaches*. (United States of America: Pearson New International Edition, 2014), 51.

<sup>35</sup> C.R. Kothari, *Research Methodology* ... 2.

English classroom instruction and the teacher's technology integration levels.

### **C. Research Setting**

This study took place at MAN 2 Gresik which is located on Jl. Raya Metatu No.07 Benjeng Gresik 61172. Before collecting the data, the researcher did a pilot study for strengthen the instruments on XII MIPA 3. The researcher observed the English teacher on four times in two weeks, which are XII IPS 3, XII IPS 2, XII MIPA 2, and XII MIPA 4.

### **D. Data and Source of Data**

#### **a. Data**

The data of this study is the teacher's activities on English classroom instruction in integrating technology which have been used by the teacher in the teaching and learning process. The data collected and analyzed using observation checklist of SAMR model.

#### **b. Source of Data**

Related to data, the researcher interviewed the technology which was used in the English classroom instruction. The data is about technology, application, etc. which has been used by the teacher. It is used to know the teacher's level in using technology integration for guiding and explaining materials in English classroom instruction.

### **E. Data Collection Technique**

In collecting the data, the researcher interviewed the teacher to know the use of technology integration in English classroom instruction. The researcher asked the teacher some questions based on interview guideline that is made before, because the researcher must ask questions properly and intelligently and must record the responses accurately and completely.<sup>36</sup> Thus, interview guideline is important point before interviewing.

On the other hand, the researcher did observation to know what technology integration which the teacher used. The observation method is the most commonly used method especially in studies

---

<sup>36</sup>C.R. Kothari, *Research Methodology*... 99.

relating to behavioral sciences. In a way we all observe things around us, but this sort of observation is not scientific observation. Observation becomes a scientific tool and the method of data collection for the researcher, when it serves a formulated research purpose, is systematically planned and recorded and is subjected to checks and controls on validity and reliability.<sup>37</sup> While doing interview, the researcher observed the teacher using observation checklist formulated based on the SAMR Model. The checklist consists of some activities in integrating technology in the English classroom instruction. Moreover, the researcher took some pictures in the English classroom instruction to support the data.

## **F. Research Instrument**

Data are required to undertake the findings of this study. Those data can be obtained by using these following instruments:

### **a. Interview Guideline**

The researcher interviewed the English teacher and recorded the conversations. The interview guidelines which consist of some questions related to the theory and the use of technology integration in English classroom instruction. It used semi-structured interview, so the researcher added and asked some questions related to the topic of questions. (See appendix 4)

### **b. Observation Checklist**

In collecting the data the researcher did not only interview the teacher, but also observed the activities in the English classroom instruction in using technology integration which based on observation checklist of SAMR model. It consists of technology integration categories which are used by the teacher and some activities in the English classroom instruction in using technology integration. (See appendix 5 and 6)

### **c. Field Note**

In observing the teacher's activities on integrating technology, the researcher took some notes. It helped the researcher in analyzing data related to the technology integration which is used by the teacher. (See Appendix 7)

---

<sup>37</sup>C.R. Kothari, *Research Methodology*... 96.

## G. Data Analysis Technique

In this study, the researcher obtained the data through observation and interview. The data was analysed through the following procedures:

### a. Observation

As stated before, the researcher used observation checklist which was adapted from “Seven Technology Category”<sup>38</sup> and “SAMR Model Activities”<sup>39</sup>. This observation checklist showed the technology category which was integrated by the teacher and the teacher’s technology integration level in the English classroom instruction. The steps to analyse the observation checklist were presented as follow:

- a) Collected the observation checklist.
- b) Analysed the data provided in this checklist.
- c) Input the data based on the activities in the English classroom instruction.

### b. Interview

The data also was collected through interview. It was analysed deeply and thoroughly. The techniques conducted as below:

- a) Analysed the data of the interview, the transcribed data was identified.
- b) The data of the interview was analysed by reading and reflecting the transcript.
- c) The data was interpreted and discussed before drawing conclusion based on the research questions.

### c. Combining the data collected from observation and interview

The data was collected from the observation and interview was analysed through the following steps:

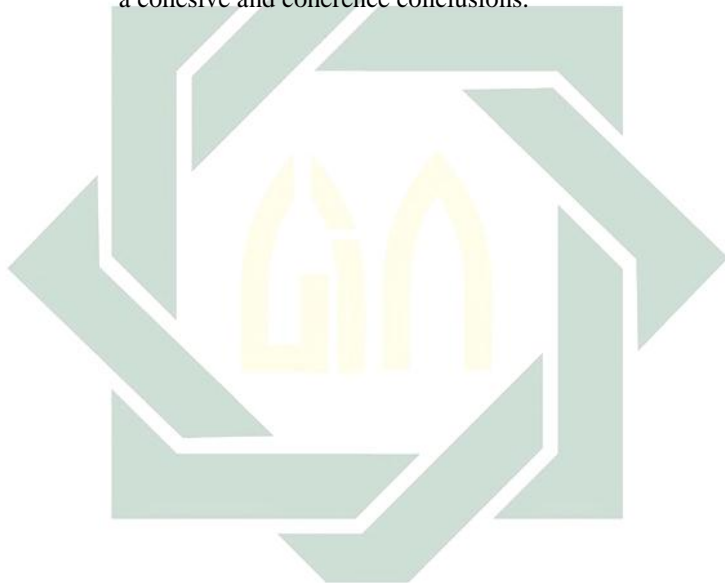
- a) Analysed the technology category integrated by the teacher in the English classroom instruction based on the observation checklist.

---

<sup>38</sup> Howard Pitler, et.al., Using Technology... 12.

<sup>39</sup> (Adapted from District 220 SAMR Activity Scale for Technology Opportunities on [www.bsd220tech.blogspot.sg](http://www.bsd220tech.blogspot.sg) and Transforming The Teaching of Listening and Reading Using the SAMR Model by Flora Debora Floris and Willy A. Renandya)

- b) Analysed the teacher's technology integration level in English classroom instruction based on the observation checklist of SAMR model activities.
- c) Given further explanation and interpretation for the result of analysis.
- d) The last step made a conclusion based on the findings and discussion of this study. The researcher related the result of the data from observation and theory used in this study to strengthen the result. The researcher combined them to make a cohesive and coherence conclusions.



## CHAPTER IV

### RESEARCH FINDING AND DISCUSSION

This chapter presents the finding of this study. It deals with the presentation of the data, data analysis, and discussion about data obtained from interview, observation, and documentation. These data analysis are presented descriptively.

#### A. Research Finding

In this part, the researcher presented the data related to the problems of the study; (1) what are technology categories integrated by the teacher for English classroom instruction at MAN 2 Gresik? (2) What is the teacher's technology integration level for English classroom instruction at MAN 2 Gresik? To answer those research questions, the researcher analysed the technology categories which are used by the teacher and classify the teacher's technology integration level for English classroom instruction at MAN 2 Gresik.

The researcher collected the data by interviewing and observing the English classroom instruction. It was collected on Thursday 22<sup>nd</sup> of November. The researcher observed two classes XII IPS 3 and XII IPS 2, and Friday 23<sup>nd</sup> of November 2018, the researcher observed XII MIPA 2 and XII MIPA 4. Based on those data, the researcher obtained the following results:

##### 1. Technology Categories Integrated by the Teacher

Based on the data analysis, there were some technologies categories integrated by the teacher in the English classroom instruction. It is used for searching materials and references related to the materials, preparing materials before English classroom instruction, giving students score, etc. To know the technology categories in the English classroom instruction, the analysis presented on the table 4.1, 4.2, 4.3, and 4.4.

Table 4.1: The Technology Categories Integrated by the Teacher  
at XII IPS 3

Technology Category	Technology Used
Word processing application	Microsoft Word
Multimedia	Microsoft Power Point Windows Media Player

Table 4.1 was about technology categories integrated by the teacher at XII IPS 3 and the theme was about Reviews Text. Firstly, the teacher showed a song video related to the material. The teacher showed a song for making students took pay attention to the lesson and sang together. The title of the song was “F.R.I.E.N.D.S” by Anne Marie. It is showed by using Windows Media Player. In making students easily to guess the topic that going to learn, the teacher asked students to review some movies that they ever watched. One of them was “Laskar Pelangi”. The teacher asked students to review the movie using their words, while the teacher typed on Microsoft Word. Then, the teacher showed presentation slides about “Review Text”. The teacher explained the purpose and the generic structures of it. The students wrote the explanation on book. For making students have better understanding about Review Text, the teacher presented an action movie entitled “Den of Thieves” by integrating Windows Media Player. The teacher asked students to review the movie by typing on Microsoft Word and collected in the next meeting. Thus, in the English classroom instruction, the teacher integrated three technology categories, they were word processing application in which the teacher integrated Microsoft Word for typing and preparing the material, multimedia category in which the teacher integrated Microsoft Power Point for presenting the materials and Windows Media Player for playing some videos.

Table 4.2: The Technology Categories Integrated by the Teacher at XII IPS 2

Technology Category	Technology Used
Word processing application	Microsoft Word Adobe Reader
Multimedia	Microsoft Power Point Windows Media Player

Table 4.2 described the technology categories which integrated by the teacher at XII IPS 2 and the material was about Discussion Text. In order to make students easily guessing the topic of that day, the teacher gave an example text about national examination by integrating Adobe Acrobat Reader. Then, teacher explained students about the roles of online national examination.

The teacher asked students' opinion about it whether they agreed or disagreed. Directly the teacher mentioned "Discussion Text" as the topic of that day. The teacher showed presentation slides by using Microsoft Power Point for explaining material and making students understanding about the generic structures of discussion text. After that, the teacher asked students to take notes on students' book. For checking students understanding about generic structures of "Discussion Text", the teacher showed a text using Microsoft Word and asked them to find it. The teacher integrated information applets for searching any information related to the material, it was prepared by the teacher before English classroom instruction. After that, the teacher showed some videos related to the discussion text one of them about Anne Marie performance on the stage in singing the song which has the title "Rockabye". The teacher asked them to give opinion about agreement or disagreement of Anne Marie performance. The teacher integrated Windows Media Player for showing the videos. Therefore, in the English classroom instruction, the teacher integrated four technology categories. They are word processing application in which the teacher integrated Microsoft Word and Adobe Reader in giving students example about a text, multimedia category in which the teacher integrated Microsoft Power Point for explaining the material about "Discussion Text" and Windows Media Player for showing a video by Anne Marie.

Table 4.3: The Technology Categories Integrated by the Teacher at XII MIPA 2

Technology Category	Technology Used
Word processing application	Microsoft Word Adobe Reader
Multimedia	Microsoft Power Point Windows Media Player

Table 4.3 described the technology categories which were integrated by the teacher at XII MIPA 2 and the material was about Discussion Text. The teacher showed a video of Calum Scott entitled "You're The Reason" by integrating Windows Media Player in front of the class. Besides, the students listened to the song the students have to read and understanding

the meaning of the lyric because the teacher asked students to give opinion about its meaning whether students agreed or disagreed about it. Then, the teacher showed a text about an example of online national examination and explained its roles by integrating Adobe Acrobat Reader. The students should gave their about opinion about it again. After students guessing the topic, the teacher explained the material by integrating Microsoft Power Point. The teacher explained the generic structure of “Discussion Text” and showed a text using Microsoft Word. The students should found the generic structures of the text. After that, the students discussed and gave opinion of agreement and disagreement about it. So, the teacher integrated three technology categories in the English classroom instruction, such as word processing application, in which the teacher integrated Microsoft Word and Adobe Reader, multimedia in which the teacher integrated Microsoft Power Point for explaining the materials about “Discussion Text” and Windows Media Player for playing a video by Calum Scott.

Table 4.4: The Technology Categories Integrated by the Teacher at XII MIPA 4

Technology Category	Technology Used
Word processing application	Microsoft Word
Multimedia	Microsoft Power Point Windows Media Player
Spread sheet software	Microsoft Excel

Table 4.4 explained the technology categories which were integrated by the teacher at XII MIPA 4. In the opening section, the teacher gave some papers of students’ exercises on the last meeting and asked students to correct it together. The teaching showed the exercise by using Microsoft Word, the correct answer was typed by the teacher after discussing number by number on Microsoft Word. After that, the teacher collecting the students' score by asking students one by one based on the attendance list number and typed the score by using Microsoft Excel. The teacher showed a song by Anne Marie entitled “F.R.I.E.N.D.S” on Windows Media Player before going to the material. The purpose of song was to make students more interested in the lesson and the students sang together. Then, the

teacher encouraged students to guess what the material on that day by asking students about the movie and contain based on students experience. Directly the teacher mentioned the material by showing presentation slide and explained the material. The material was about “Reviews Text”. The teacher explained the generic structure of Reviews text by integrating Microsoft Power Point. The teacher asked students to take notes on students' book. For making students understanding the material the teacher showed an action movie entitled “Den of Thieves”. Before watching the movie, the teacher explained that the students should review the movie and typed the result by using Microsoft Word, it will be collected on the next meeting hard copy. Thus, in the English Classroom instruction the teacher integrated four technology categories which were Microsoft Word for writing the answer of the exercises which included on word processing application, Microsoft Excel for collecting students' scores which included on Spread sheet software category, multimedia category, in which the teacher used Microsoft Power Point for explaining the material about “Reviews Text” and Windows Media Player for showing the some videos consist of Anne Marie and an action movie which included on multimedia category.

Based on the result of interview (See Appendix 5), the teacher also integrated brainstorming and organizing technology category to create ideas, such as making main map related to the topic. Those technology categories were integrated by the teacher for making students having same understanding to the materials between MIPA students and IPS students. Therefore, the teacher taught the students in the same strategies by integrating some technology categories in the English classroom instruction.

## **2. The Teacher's Technology Integration Level**

After analyzing the technology categories which had been used by the teacher, the researcher related those technologies into the English classroom instruction. The researcher tried to know the teacher's technology integration level by observing some activities at four classes. Those activities will be explained on the tables 4.5, 4.6, 4.7, and 4.8.

Table 4.5: Teacher's Activities at XII IPS 3

No.	Activities	Technology Used	SAMR LEVEL			
			S	A	M	R
1.	<b>Teaching listening:</b> Listening to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			
2.	Teaching writing: Word processing with additional functions like spell check, cut and paste.	Word processing application: Microsoft Word		√		
3.	<b>Presenting Material</b> Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Multimedia: Microsoft PowerPoint		√		

Table 4.5 explained activities in the English classroom instruction at XII IPS 3. In the opening section, the teacher played a video entitled "F.R.I.E.N.D.S." by Anne Marie using Windows Media Player and asked students to listen to the song then sang together. The students should focus on listening to the song to get correct pronunciation of the song lyric because after that the students sang together. Then, the teacher asked students to review one of the movie which has the title "Laskar Pelangi" and the teacher typed it on Microsoft Word. In making students get better understanding on the material about "Reviews Text", the teacher explained it by showing a presentation slides using Microsoft Power Point, it consist of narration of the text and discussed it together. By those activities the teacher helped students to increase their skills, such as listening, speaking, and writing skills. In teaching listening skill the teacher practiced students listening skill by playing a video song. Besides, the teacher also practiced the students listening speaking skill by singing together in the correct pronunciation. Not only that, the students also learned the figurative languages on the song lyric, because the song lyric did not use literal meaning, so the students

knew what the meaning of the song and got the moral value of the song. By teaching writing the teacher taught students to write based on accuracy by using spell check which is on the word processing.

The finding showed that the teacher taught two English skills, which were writing and listening skill. While, in the English classroom instruction the teacher was on the substitution level in teaching listening skill, and augmentation level when the teacher taught writing skill by typing in word processing with additional functions like spell check, cut and paste, online submission. Moreover, the teacher was on the augmentation level in creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc. It was concluded that the teacher at the highest level which was on the augmentation level in the English classroom instruction at XII IPS 3.

Table 4.6: Teacher's Activities at XII IPS 2

NO.	ACTIVITIES	Technology Used	SAMR LEVEL			
			S	A	M	R
1.	<b>Teaching Reading Skill</b> Reading text online or digital texts	Word processing application: Adobe Acrobat Reader	√			
2.	<b>Presenting Material</b> Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Multimedia: Microsoft PowerPoint		√		
3.	<b>Teaching Reading Skill</b> Reading text online or digital texts	Word processing application: Microsoft Word	√			
4.	<b>Teaching Listening Skill</b> Listening to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			

Table 4.6 examined some activities which had been used by the teacher in the English classroom instruction at XII IPS 2. The teacher showed a digital text about online national examination using Adobe Acrobat Reader in front of the class

and the students read it. The students gave opinion on the text whether they agreed or disagreed. Then, the teacher presented presentation slides about "Dicussion Text" by using Microsoft Power Point. Besides, the teacher opened a document which consisted of an example of "Discussion Text". The students focused on read the text to find out the generic structures and gave opinion of agreement or disagreement on the text. The teacher also opened some references which had been searched related to the material for making students having better understanding about Discussion text. The teacher played a video by Anne Marie entitled "Rockabye" using Windows Media Player to make students interested on the lesson, but after playing the song the students gave some comments about it. It was about giving comments on the performances. Some students agreed and disagreed, so it was interesting moment in discussing someone performances.

In the English classroom instruction the teacher practiced students' skills on reading and listening. Besides, reading the text the students practiced their speaking skill by giving comments to the text. Not only that, while listening to the song the students also learned the correct pronunciation of the word and the meaning of the song. In the English classroom instruction, the finding found that the teacher on the substitution level of SAMR model, which the teacher taught reading and listening skills.

Table 4.7: Teacher's Activities at XII MIPA 2

NO.	ACTIVITIES	Technology Used	SAMR LEVEL			
			S	A	M	R
1.	<b>Teaching Listening Skill</b> Listening to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			
2.	<b>Teaching Reading Skill</b> Reading text online or digital texts	Word processing application: Adobe Acrobat Reader	√			
3.	<b>Presenting Material</b> Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Multimedia: Microsoft PowerPoint		√		
4.	<b>Teaching Reading Skill</b> Reading text online or digital texts	Word processing application: Microsoft Word	√			

Table 4.7 described some activities in the English classroom instruction at XII MIPA 2. Firstly, in making students more concentrate to the lesson, the teacher played a video by Calum Scott entitled "You're The Reason" by integrating Windows Media Player. After listening to the song the teacher asked students to interpret the meaning of the song, it was not literal meaning but the hidden meaning of the song which used figurative languages, so students will be more focused on the meaning rather than vocabularies. By listening to the song the students interested in the lesson and listened to the teacher's explanation. The teacher showed a digital document about online national examination in front of the class using Adobe Acrobat

Reader. The students read it and gave comments on it. There were some students delivered their opinion of agreement than others disagreement. The class was crowded but interesting, it because the material was about Discussion Text, so the students active on the class by commenting on the text. Although students knew the material was about Discussion Text, the teacher explained it clearly for making students really understood about the material by presenting the explanation on the presentation slides by using Microsoft Power Point. It consisted of the explanation of the purpose, the generic structures, and the example of the text. To know students' understanding on the material the teacher opened a document using Microsoft Word and asked students to find out the generic structures of the Discussion text, give comments, and discuss it together again. The teacher taught two English skills, which were reading and listening skill. The teacher was on the substitution level in teaching reading and listening, while in presenting material the teacher was on the augmentation level of SAMR model.

Table 4.8: Teacher's Activities at XII MIPA 4

NO.	ACTIVITIES	Technology Used	SAMR LEVEL			
			S	A	M	R
1.	<b>Teaching Writing Skill</b> Word processing with additional functions like spell check, cut and paste.	Word processing application: Microsoft Word		√		
2.	<b>Teaching Listening Skill</b> Listening to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			
3.	<b>Presenting Material</b> Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Multimedia: Microsoft PowerPoint		√		
4.	<b>Teaching Listening Skill</b> <b>Listening</b> to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			

Table 4.8 was about some activities which had been done by the teacher in the English classroom instruction at XII MIPA 4. Firstly, the teacher asked students to correct the exercises on the previous meeting. The teacher typed the correct answer digitally using Microsoft Word. Then collecting the scores by asking every student based on attendance list on using Microsoft Excel. For making students interested in the English classroom instruction the teacher played a song entitled “F.R.I.E.N.D.S.” by Anne Marie using Windows Media Player. The teacher asked students to focus on the song because they repeated the lyric by singing together. In the whilst section, the teacher asked students the movies which they watched before and related to the material on that day. It was for making students to guess the material which they will be learned. It was about “Review Text”, so the teacher asked students to review one of the movies which have the title “Laskar Pelangi”. Besides, the teacher explained the material by presenting presentation slides using Microsoft Power Point in front of the class visually by showing a text and the explanation of it. In order to make students understanding on the material the teacher showed an action movie entitled ‘Den of Thieves’. Before showing the movie, the teacher explained to the students to review the movie and it will be collected on hard copy on the next meeting.

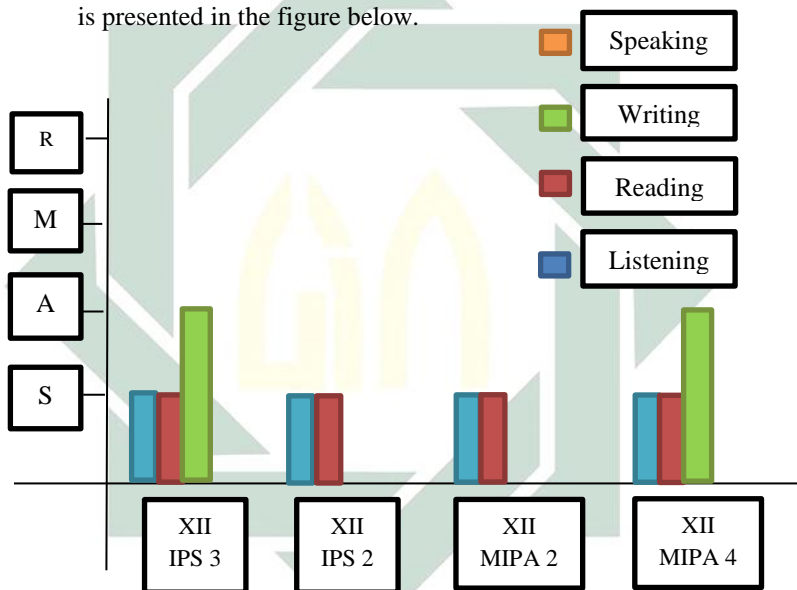
Based on the finding, the teacher taught writing, reading, and listening skills. The teacher was on the substitution level in teaching reading and listening skill, while in teaching writing and presenting the materials the teacher was on the augmentation level of SAMR model. Those findings were based on SAMR model activities. In this model there were four levels, Substitution, Augmentation, Modification, and Redefinition level. The teacher’s technology integration level is presented in the table below.

Table 4.9: Teacher's Activities Based on SAMR Model

No.	Activities	Technology Used	SAMR Level			
			S	A	M	R
1.	<b>Teaching Listening Skill</b> Listening to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			
2.	<b>Teaching Reading Skill</b> Reading text online or digital texts	Word processing application: Adobe Acrobat Reader	√			
3.	<b>Teaching Writing Skill</b> Word processing with additional functions like spell check, cut and paste.	Word processing application: Microsoft Word		√		
4.	<b>Presenting Material</b> Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Multimedia: Microsoft PowerPoint		√		

From the table 4.9, it is apparent that the teacher's technology integration level was on substitution and augmentation level which based on SAMR model level in the English classroom instruction. As mentioned in the scope and limitation that this present study only focused on teaching four English skills, such as listening, speaking, reading and writing. In teaching reading and listening, the teacher was on the substitution level. The teacher asked students to listen to online dialogues by using computer speakers and multimedia technology category in the classroom in teaching listening skill. The teacher asked students to read digital text by using Adobe Acrobat Reader which included on word processing application category in teaching reading skill. The teacher taught both two skills at all classes, XII PS 3, XII IPS 2, XII MIPA 2, and XII MIPA 4.

In teaching writing the teacher was on the augmentation level, which used Microsoft word as word processing with additional functions like spell check, cut and paste, online submission. The teacher was on augmentation level in teaching writing at XII IPS 3 and XII MIPA 4. The teacher did not integrate technology in teaching speaking skill, but the teacher always tries to make students active in the English classroom instruction by asking students some questions related to the materials. Those activities which commonly used by the teacher is presented in the figure below.



**Figure 4.1:** Chart of Teacher's Technology Integration Level of SAMR Model

## B. Discussion

The result of the research was known concretely after doing an analysis of the data. By using this analysis, the researcher was able to know the technology categories integrated by the teacher and the teacher's technology integration level in the English classroom instruction at 12<sup>th</sup> grade of MAN 2 Gresik.

### 1. Technology Category Integrated by the Teacher

Considering the result of this study, there is some technology categories integrated in the English classroom instruction at MAN 2 Gresik, especially at twelve grades. In collecting the data of this study, the researcher did not only observe the English classroom instruction in the class, but the researcher also conducted this study by interviewing the teacher in order to know another technology category integrated by the teacher. It is explained in the following table.

Table 4.10: Technology Category Integrated by the Teacher

Technology Category	Technology Used
Word Processing Application	Microsoft Word Adobe Acrobat Reader
Spread Sheet Software	Microsoft Excel Inspire Data
Organizing and Brainstorming	SMART Ideas Visual Mind
Multimedia	Microsoft Power Point Windows Media Player
Web Resources	Movies Pictures

Table 4.10 classified the technology categories integrated by the teacher in the English classroom instruction. The first category is word processing application. It is software that enables the user to type and manipulate text.<sup>40</sup> It is used by the teacher for typing the materials in giving exercises, answering the exercises editing song lyrics, and showing students digital text. Based on the observation, the teacher integrated two kinds of word processing application categories, such as Microsoft Word and Adobe Acrobat Reader. In the English classroom instruction, the teacher integrated Microsoft Word for all classes of twelve grades which is found on the table 4.1, 4.2, 4.3, and 4.4. While, Adobe Acrobat Reader is integrated by the teacher at XII IPS 2 and XII MIPA 2 which is found on the table 4.2 and

<sup>40</sup> Howard Pitler, et.al., Using Technology... 12.

table 4.3. Author found that word processing application is the perfect tool for a process approach to writing, because it makes revising and recopying texts physically easy. It also help writers use various strategies for gathering information, organising it, and translating it into sentences, paragraphs and extended texts<sup>41</sup>, which is in good statement with the result of this present study that the teacher integrated word processing application for preparing the materials in the English classroom instruction.

The second category is spread sheet software. It is software that enables the user to type and manipulates numbers.<sup>42</sup>The teacher uses two kinds of spread sheet software categories, such as Microsoft Excel and Inspire Data. Based on the finding of result table 4.4 the teacher integrated Microsoft Excel at XII MIPA 4 in the English classroom instruction, but usually the teacher uses it for scoring students' work at all twelve classes which were four classes for MIPA and three classes for IPS. Spreadsheet software is used by many teachers to reduce the need for tedious calculations allowing greater attention to be focused on the subject itself.<sup>43</sup> It is believed to be capable of solving almost any problem involving numbers or formulas, and especially powerful if data is to be repetitively and changes over time.<sup>44</sup> In this present study, the teacher used Microsoft Excel for collecting the students' score by asking students after correcting the students' work and Inspire Data for processing it. It is used by the teacher for collecting and processing the students' scores which is changed over time.

The third category is organizing and brainstorming. It was software that enables the user to create idea maps, KWHL charts, and category maps.<sup>45</sup> Based on the interview, the teacher integrated SMART Ideas and Visual Mind for creating ideas in preparing materials before English classroom instruction in the

---

<sup>41</sup> Tony Hopwood, *The Use of the Word-Processor in the Teaching of English as a Foreign Language to Adults. Academic Reports* (Cambridge: Bell Educational Trust, 1989), 15.

<sup>42</sup> Howard Pitler, et.al., *Using Technology...* 12.

<sup>43</sup> M. Mirac Ozar, "Spreadsheet in Education" *Journal of Education*. Vol. 12, 1996, 81.

<sup>44</sup> M. Mirac Ozar, "Spreadsheet in Education"... 82.

<sup>45</sup> Howard Pitler, et.al., *Using Technology...* 12.

class.<sup>46</sup> A teacher should think about ways to generate innovative ideas in brainstorming sessions because it is effectively used to enhance students' written skills particularly, for generating content. If technology is integrated for pre-writing tasks, especially for brainstorming sessions the process will be interactive.<sup>47</sup> Thus, this finding suggests that organizing and brainstorming helps teacher in increasing students understanding and writing skills.

The next category is multimedia technology category. It is software that enabled the user to create or access visual images, text, and sound in one product.<sup>48</sup> It is an important one that should be integrated for students' listening skills. Multimedia technologies such as audio, video, and animation are becoming common place and becoming a potential tool for listening.<sup>49</sup> Based on the finding of this study, the teacher integrates Microsoft Power Point in preparing presentation slides and Windows Media Player in playing some movies. It consists of narration and pictures which related to the material. The teacher integrates Microsoft Power Point for explaining materials to the students' at all twelve classes. It is integrated by the teacher for making students having better understanding the materials visually.

Considering this present study, the teacher uses multimedia technology to create more colourful and stimulating language classes. It gives some advantages, such as motivates students to learn English, develops students' communicative competence, widens students' knowledge about the Culture of English, improves teaching efficiency, enhances interaction among students and between teacher and students, creates a conducive teaching environment in the classrooms, and provides opportunities for English teaching outside the classroom.<sup>50</sup>

---

<sup>46</sup>Based on interview with Mr. Slamet Hariyono on Thursday 22<sup>nd</sup> of Nopember 2018

<sup>47</sup>Vijayakumar Selvaraj, "Using Technology for Brainstorming in a Writing Class: An Innovative Approach" *Journal of Technology foe ELT*. Vol II No.2, Chennai 2011, 2.

<sup>48</sup> Howard Pitler, et.al., *Using Technology...* 12.

<sup>49</sup>Selim Gunuc, - Nuri Babacan, "Technology Integration ... 353.

<sup>50</sup>Min Pun, "The Use of Multimedia Technology in English Language Teaching: A Global Perspective", *Crossing the Border: International Journal of Interdisciplinary Studies*. Vol. 1 No. 1, Pokhara 2013, 31-33.

Therefore, the teacher integrates multimedia technology in making English classroom instruction more active.

Then, the teacher integrates web resources category. It is resources available on the web that enabled the user to gather information or apply or practice a concept.<sup>51</sup> The internet in English classroom instruction contributes to the motivation of students, the more so because the students find it a useful, different and fun teaching aid. Besides, from being a source of information and place to showcase projects, the internet resources can be used as a communicational teaching aid.<sup>52</sup> Related to the findings, the teacher integrated movies and pictures which were related to the materials. The movies were about song videos, song lyric, and action movies. The teacher played the movies and pictures by integrating Windows Media Player. The purpose of integrating this technology category was to attract students' attention to the lesson, so the teacher always played some videos in the English classroom instruction, especially in the English classroom instruction at IPS classes.

From those explanations, it can be concluded that the teacher integrates three technology categories in the English classroom instruction which are word processing application, spread sheet software and multimedia category. While, two technology categories, such as organizing and brainstorming category and web resources are used by the teacher out of the English classroom instruction for preparing materials.

## 2. The Teacher's Technology Integration Level

After analyzing and knowing the technology categories which were integrated by the teacher into the English classroom instruction, the researcher finally can know the way the teacher integrated technology from some activities in the English classroom instruction. Those activities determined the specific level of the teacher's technology integration in the English classroom instruction. The data of the level presented in the following table.

---

<sup>51</sup>Howard Pitler, et.al., Using Technology... 12.

<sup>52</sup>Rona Busljeta, "Effective Use of Teaching and Learning Resources", *C-zech-Polish Historical and Pedagogical Journal*. Vol. 5 No. 2, Croatia 2013, 67.

Table 4.11: Teacher's Activities Based on SAMR Model

No.	Activities	Technology Used	SAMR Level			
			S	A	M	R
1.	<b>Teaching Listening Skill</b> Listening to videos and computer speaker in the classroom	Multimedia: Windows Media Player	√			
2.	<b>Teaching Reading Skill</b> Reading text online or digital texts	Word processing application: Adobe Acrobat Reader	√			
3.	<b>Teaching Writing Skill</b> Word processing with additional functions like spell check, cut and paste.	Word processing application: Microsoft Word		√		
4.	<b>Presenting Material</b> Creating a presentation with visuals such as photos, videos, animations, etc. or audio such as sound effects, narration, etc.	Multimedia: Microsoft PowerPoint		√		

Table 4.11 examines the teacher's activities in integrating technology in the English classroom instruction at all twelve grades. In teaching writing the teacher is on the substitution level, which technology acts as a direct tool substitute, with no functional improvement.<sup>53</sup> It is found that teacher uses Microsoft word as a word processor as typewriter in typing materials, it can be found on the table 4.6 and table 4.7. Moreover, in teaching writing at XII IPS 3 and XII MIPA 4, which the teacher uses word processor in making exercises and correcting students' work. It is stated that the teacher is on the

<sup>53</sup>Carolyn Anne Beisel, Doctoral Dissertation... 17.

augmentation level which technology acts as a direct tool substitute, with functional improvement.<sup>54</sup> Thus in teaching writing the teacher is on the augmentation level of SAMR model.

In the teaching reading the teacher shows a digital text in giving the examples of the text, which is found on the table 4.6 and table 4.7. On these tables the teacher gives an example of national examination in order to discuss the text together whether they are agreeing or disagreeing. Puentedura stated that technology could be used as direct tool of substitution to the traditional forms of teaching and learning.<sup>55</sup> In this present study, the teacher uses a digital text as substitutes a text book. Therefore, the teacher is on the substitution level in teaching reading.

The teacher practices the students listening skills by playing a song in the classroom. The students ask to repeat the lyric by pronouncing the correct pronunciation on the song lyrics. It is found on the table 4.5 and table 4.8. After giving students a song, they will be sung together in the correct pronunciation. In the English classroom instruction, the teacher is on the substitution level which the teacher uses technology a direct tool substitute, with no functional improvement<sup>56</sup> by listening to the song video related to the materials.

In addition, the teacher presents materials by using presentation slides which consist of materials explanation. Those activities determine that the teacher is on the augmentation level which the teacher uses technology as a direct substitution tool to enhance learning in either online or offline learning environments. In this level the technology improves learning or provides added functional improvement.<sup>57</sup> Thus, the teacher is on augmentation level in searching and collecting materials and presenting materials by using presentation slides.

Regarding those activities which had been used by the teacher, the researcher tries to know the teacher's technology integration level by analyzing the teacher's activities on the

---

<sup>54</sup>Elizabeth H. Andrew, Doctoral Dissertation: "*Teacher Pedagogy*... 12.

<sup>55</sup> Carolyn Anne Beisel, Doctoral Dissertation: "New or Novice Teacher Integration of Mobile Learning Instruction"... 17.

<sup>56</sup>Carolyn Anne Beisel, Doctoral Dissertation... 17.

<sup>57</sup>Elizabeth H. Andrew, Doctoral Dissertation: "*Teacher Pedagogy*... 12.

SAMR model activities. It has four levels which redefinition as the highest level and substitution as the lowest level in integrating technology. On the table 4.10 the researcher identifies the level of the teacher's activities. Based on the teacher's activities which commonly used, the teacher is classified on the substitution level in teaching listening and reading skills at all classes, XII IPS 3, XII IPS 2, XII MIPA 2, and XII MIPA 4. It is because the teacher uses technology as a direct tool substitute with no functional improvement, it is only changing the previous tool. In teaching reading, the teacher shows a digital text by using Adobe Acrobat Reader as substitute text book. In teaching listening, the teacher shows some videos by using Windows Media Player as substitute teacher's explanation. While, the teacher is also classified on the augmentation at XII IPS 3 and XII MIPA 4, because the teacher integrates technology acts as a direct tool substitute, with functional improvement<sup>58</sup> in teaching writing skill. In both two classes the teacher uses word processing application for explaining material. However, based on the technology category, the teacher is identified on the substitution level in integrating word processing application and multimedia category in teaching reading and listening. Moreover, based on those activities the teacher is classified on augmentation level in teaching writing which uses word processing with additional function, like spell check, cut and paste the sentences.

Considering this study, the teacher has two levels in the English classroom instruction. The teacher is on the substitution level in teaching reading and listening skill. While, the teacher is classified on the augmentation level in teaching writing skill, which the teacher integrated technology a direct tool substitute, with no functional improvement<sup>59</sup> by integrating word processing application and multimedia as substitute previous tools. The present finding also support author study which concludes that the teacher is mostly on the substitution and augmentation levels the majority of teachers and students using the technology every

---

<sup>58</sup>Elizabeth H. Andrew, Doctoral Dissertation: "*Teacher Pedagogy...* 12.

<sup>59</sup>Carolyn Anne Beisel, Doctoral Dissertation... 17.

day.<sup>60</sup> In this study, the teacher is on the augmentation level when the teacher teaches writing skill, in addition the teacher presents the materials is also on the augmentation level. In other words, the teacher had passed the substitution level, because the teacher uses technology as direct tools substitute with functional improvement. Moreover, based on the limitation of the study, it is only focusing on four English skills, which are listening, reading, speaking, and writing. Therefore, in this study the teacher is identified on the Augmentation in the teaching writing, which the teacher uses Microsoft Word as a word processing with additional functions, like spell check, cut and paste the document.

---

<sup>60</sup>Glenn P. IIWood., Doctoral Dissertation: *"Teachers' Perceptions of the Impact of iPads Use in the Classroom on Their Instructional Practice"*. United State of America: University of Maryland, 2017.

## **CHAPTER V**

### **CONCLUSION AND SUGGESTION**

This chapter discusses about the conclusion of this study related to the teacher's technology integration level in the English classroom instruction. This chapter also contains of the suggestions related of this study for teachers, students and next researchers.

#### **A. Conclusion**

From the analysis in the chapter four regarding to the technology integration level, there are two points the first is about technology category integrated by teacher and the teacher's technology integration level in the English classroom instruction.

##### **1. Technology Category Integrated by the Teacher**

In the English classroom instruction, the teacher integrates some technology categories which are word processing, spreadsheet software, organizing and brainstorming, multimedia, web resources, and communication software. The teacher integrates three technology categories in the English classroom instruction which are word processing application, spread sheet software and multimedia category. While, two technology categories, such as organizing and brainstorming category and web resources are used by the teacher out of the English classroom instruction. Those technology categories are integrated by the teacher for making students having the same understanding on the materials between MIPA and IPS students.

##### **2. Teacher's Technology Integration Level**

Considering the technology categories are integrated by the teacher, this study only focuses in teaching four English skills, they are listening, reading, speaking, and writing. By analyzing those activities in the teaching four English skills, the researcher tries to know the teacher's technology integration level in the teacher learning process. Based on SAMR model the teacher is classified on the augmentation level. It means the teacher passed the substitution level, because the teacher is on the augmentation level, which integrates technology as a direct tool substitute, with functional improvement. Therefore, the teacher is classified on the augmentation level in teaching writing in which the teacher integrates word processing with additional functions like spell check, cut and paste the documents.

## **B. Suggestion**

After conducting this study related to the teacher's technology integration level, the researcher gives the significant suggestions which are stated as follow:

### **1. For the Teacher**

The teacher need to know the technology integration level, by reading this study the teacher should develop the technology integration in the English classroom instruction into the highest level of technology integration. The teacher can integrate the technology categories based on the trending topic technology in the English classroom instruction.

### **2. For Students**

Students can understand the materials easily by integrating technology into the English classroom instruction. They also know the technology integration which related to the material and practices their English skills at home by integrating technology.

### **3. For the Next Researcher**

Next researcher can develop this current study because this study has a lot of weaknesses. The next researcher can identify the students technology integration level which is used the theory of this current study or other theories.

## REFERENCES

- Andrew, Elizabeth H. Doctoral Dissertation: “Teacher Pedagogy to Develop Student Writing through the Integration of text-To-Speech Technology”. Australia: Flinders University, 2016.
- Beisel, Carolyn Anne. Doctoral Dissertation: “New or Novice Teacher Integration of Mobile Learning Instruction”. Walden: Walden University, 2017.
- Cennamo, Katherine S., John D. Ross, Peggy A. Ertmer. *Technology Integration for Meaningful Classroom Use a Standards-Based Approach*. USA: Cengage Learning, 2010.
- Chell, Geraldine, Sean Dowling “*Substitution to Redefinition: The Challenges of Using Technology*”. (<http://www.researchgate.net>, accessed on May 03, 2018)
- Chin Lin, Grace Hui– Paul Shih-chieh Chien, *An Introduction to English Teaching: A Textbook for English Educators* (<http://ebooks.lib.ntu.edu.tw>, accessed on September 30, 2018)
- District 220 SAMR Activity Scale for Technology Opportunities, ([www.bsd220tech.blogspot.sg](http://www.bsd220tech.blogspot.sg), accessed on April 29, 2018)
- Dokstader, Joeline. 1999. “Teachers of the 21st century know the what, why, and how of technology integration” *T.H.E Journal*. Vol. 26 Issue 6. 73-76.
- Eady, Michelle J. - Lori Lockyer, “*Tools for Learning: Technology and Teaching Strategies*”. Paper presented at learning to teach in the Primary School Queensland University of Technology, Australia.

- Hamilton, Boni. *Integrating Technology in the Classroom Tools to Meet the Needs of Every Student*. USA: ISTE, 2015.
- Hockly, Nicky. 2013 "Technology for the Language Teacher: Mobile Learning" *ELT Journal*. Vol.67. 80-84.
- Kamijo, Marta Mercedes. "Evaluating Mobile Learning Activities" *Tesol Connections*. Argentina. 2017.
- Kihoza, Patrick, Irina Zlotnikova, Joseph Bada, Khamisi Kalegele. 2016. "Classroom ICT integration in Tanzania: Opportunities and challenges from the perspective of TPACK and SAMR models". *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*. Vol. 12, Issue 1. 107-128.
- Kothari, C.R. *Research Methodology Methods and Techniques* (Second Revised Edition). Jaipur: New Age International (P) Limited, 2004.
- Lobo, Alejandra Glanguilio, Rocio Lara Jimenez, "Evaluating Basic Grammar Projects, Using the SAMR Model". *Letras 61*, 2017. (<http://dx.doi.org/10.15359/rl.1-61.5>, accesses on June 13, 2018)
- Neuman, W. Lawrence. *Social Research Methods: Qualitative and Quantitative Approaches*. United States of America: Pearson New International Edition, 2014.
- Park, Joseph J., "The Use of Professional Learning Networks and Technology Integration". Paper presented for the requirement for 61-683, 2014.
- Phillips, Michael "Digital Technology Integration". In Henderson, M. – Romeo, G. (Ed.). *Teaching and Digital Technologies: Big Issues and Critical Questions*. Melbourne: Cambridge University Press, 2015.

Pitler, Howard, Elizabeth R. Hubbell, Matt Kunn, Kim Malenoski. *Using Technology With Classroom Instruction That Works*. United State: Library of Congress Cataloging, 2007.

Relan, Anju - Gillani B. J. "Web Based Instruction and the Traditional Classroom: Similarities and Differences". In khan, B (Ed.). *Web –Based Instruction*. 25-37. New Jersey: Educational Technology Publications, 1997.

Romrell, Danae, Lisa C. Kidder, Emma Wood. 2013. "The SAMR Model as a Framework for Evaluating m-Learning". *Evaluating m-Learning*. United State of America: Idaho State University.

Stefanic, Juraj., Thesis: "*ipad in English Language Classes*". Pizen: University of West Bohemia, 2015.

Summak, M. Semih - Mustafa Samancioglu. (Eds), *Technology Integration and Assessment in Education Settings*. Gaziantep, Turkey: Elsevier Ltd, 2010.

Swayne, Jaclyn M. Doctoral Disertation: "Staying Connected: Measuring the Impact of Technology Integration on Student Engagement and Achievement at the Middle Level". Portland: Concordia University, 2017.

Thieman, Gayle Y. 2008. "Using Technology as a Tool for Learning and Developing 21st Century Citizenship Skills: An Examination of the NETS and Technology Use by Preservice Teachers With Their K-12 Students" *Contemporary Issues in Technology and Teacher Education*. Vol. 8 No. 4, Portland. 342-366.

Wood, Glenn P. II., Doctoral Dissertation: "*Teachers' Perceptions of the Impact of iPads Use in the Classroom on Their Instructional Practice*". United State of America: University of Maryland, 2017.