# AN UNDERGRADUATE THESIS

# DEVELOPING ENGLISH COMPLMENTARY MATERIAL FOR COMPUTER NETWORK ENGINEERING STUDENT AT VOCATIONAL HIGH SCHOOL TELADAN OF METRO WITHIN ACADEMIC YEAR 2018/2019

By:

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Tarbiyah and Teacher's Training Faculty English Education Department

# STATE INSTITUTE FOR ISLAMIC STUDIES OF METRO1440 H/2019 M

## **AN UNDERGRADUATE THESIS**

# DEVELOPING ENGLISH COMPLIMENTARY MATERIAL FOR COMPUTER NETWORK ENGINEERING STUDENT **AT ELEVENTH GRADE OF VOCATIONAL HIGH** SCHOOL TELADAN METRO

Presented as a Partial Fulfillment of the Requirements for the Degree of Sarjana Pendidikan (S.Pd) in English Education Department

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Tarbiyah and Teacher's Training Faculty **English Education Department** 

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# STATE INSTITUTE FOR ISLAMIC STUDIES OF METRO1441 H/2019 M

# DEVELOPING ENGLISH COMPLMENTARY MATERIAL FOR COMPUTER NETWORK ENGINEERING STUDENT AT ELEVENTH GRADE OF VOCATIONAL HIGH SCHOOL TELADAN METRO

## Abstract

#### By: Andri Prayoga

English Language Teaching (ELT) within Indonesia context specifically in vocational high school needs more attention as it gives critical impacts on the direction and the quality of English learning. Learning materials is the core of the study however, in most of vocational high schools, the English learning materials is still general. It does not cover the learning needs of the apprentices. Many researchers have developed the English learning materials yet there is still a blank part on English learning material for computer network engineering student. Therefore, the researcher aims to fulfill this gap by developing the English learning materials for computer network engineering student at Vocational High School Teladan of Metro.

Research and Development method is applied to this research through four stages; planning, developing, validating and revising. The validation results show that the overall criteria are >0.5 which means that the product is valid. Furthermore, there are some points which the researcher should take a notice; (1) adapting the language according to the capability of the apprentices, simplify the material and scrutinize the study level; (2) revising the writing procedures, and; (3) adding how and why questions to stimulate the student elaboration skill, use updated materials related to computer network engineering field, add illustration to describe the difficult vocabularies and simplify the reading passages or questions. With some adaptations, the product is possible to be utilized on other vocational high schools.

Keywords : ELT, learning materials, vocational high school

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## DEVELOPING ENGLISH COMPLMENTARY MATERIAL FOR COMPUTER NETWORK ENGINEERING STUDENT AT ELEVENTH GHRADE OF VOCATIONAL HIGH SCHOOL TELADAN METRO

## Abstrak Oleh: Andri Prayoga

Pengajaran Bahasa Inggris (ELT) dalam konteks Indonesia khususnya di sekolah menengah kejuruan perlu lebih diperhatikan karena memberikan dampak penting pada arah dan kualitas pembelajaran bahasa Inggris. Namun materi pembelajaran adalah inti dari penelitian ini, di sebagian besar sekolah menengah kejuruan, materi pembelajaran bahasa Inggris masih umum. Itu tidak mencakup kebutuhan belajar para murid. Banyak peneliti telah mengembangkan materi pembelajaran bahasa Inggris namun masih ada ruang kosong pada materi pembelajaran bahasa Inggris untuk siswa teknik jaringan komputer. Oleh karena itu, peneliti bertujuan untuk memenuhi kesenjangan ini dengan mengembangkan materi pembelajaran bahasa Inggris untuk siswa teknik jaringan komputer di Sekolah Menengah Kejuruan Teladan Metro.

Metode Penelitian dan Pengembangan diterapkan untuk penelitian ini melalui empat tahap; merencanakan, mengembangkan, memvalidasi dan merevisi. Hasil validasi menunjukkan bahwa kriteria keseluruhan> 0,5 yang berarti produk tersebut valid. Selain itu, ada beberapa poin yang harus diperhatikan oleh peneliti; (1) mengadaptasi bahasa sesuai dengan kemampuan peserta didik, menyederhanakan materi dan meneliti tingkat studi; (2) merevisi prosedur penulisan, dan; (3) menambahkan pertanyaan bagaimana dan mengapa untuk merangsang keterampilan elaborasi siswa, menggunakan materi yang diperbarui terkait dengan bidang teknik jaringan komputer, menambahkan ilustrasi untuk menggambarkan kosakata yang sulit dan menyederhanakan bagian bacaan atau pertanyaan. Dengan beberapa adaptasi, produk dimungkinkan untuk digunakan di sekolah menengah kejuruan lainnya.

Kata kunci: ELT, materi pembelajaran, sekolah menengah kejuruan



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The undergraduate thesis entitled DEVELOPING ENGLISH COMPLIMENTARY MATERIALS FOR COMPUTER NETWORK ENGINEERING STUDENT AT VOCATIONAL HIGHSCHOOL TELADAN OF METRO WITHIN ACADEMIC YEAR 2018/2019. Written by: ANDRI PRAYOGA, Student Number 150107149, English Education Department, had been examined (undergraduate thesis) in Tarbiyah and Teacher Training Faculty on Thursday, October 09<sup>th</sup> 2019 at 10.30 - 12.00 p.m.

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Sudah kami dapat setujui dan dapat diajukan untuk dimunaqosyahkan, demikian harapan kami atas perhatiannya kami ucapkan terima kasih.

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| Title           | : DEVELOPING ENGLISH COMPLIMENTARY MATERIALS FOR | R  |
|                 | COMPUTER NETWORK ENGINEERING STUDENT A           | Г  |
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It has been agreed so it can be continued to the Faculty of Tarbiyah and Teacher Training in order to be discussed on the munaqosyah. Thank you very much.

Wassalmu'alaikum Wr. Wb

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Metro, 04 October 2019

The Writer OAHEO AFOTA 00Andri Prayoga 1501070149

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Menyatakan bahwa skripsi ini secara keseluruhan adalah hasil penelitian saya kecuali pada bagian-bagian yang dirujuk dari sumbernya dan disebutkan dalam daftar pustaka.

Metro, 04 Oktober 2019

Yang Menyatakan RAI 66458720 Andri Prayoga 1501070149

مَا يَفْتَحِ ٱللَّهُ لِلنَّاسِ مِن رَّحْمَةٍ فَلَا مُمْسِكَ 20-في فلا مر وهو الغزيز الحكيم (1)

ΜΟΤΤΟ

"Whatever Allah grants to people of mercy - none can withhold it; and whatever He withholds - none can release it thereafter. And He is the Exalted in Might, the Wise". -Surah Fatir (35:2)

"The pirates may burn the garden of flower yet they have no power to stop the springtime coming." (Old Proverb)

### **DEDICATION PAGE**

This undergraduate thesis is dedicated to:

My great parents Mr. Basuki Rahmad and Wulandari for their love and uncountable sacrifices.

My best sponsor, Dr.Dedi Irwansyah, M.Hum and my co-sponsor, Trisna Dinillah Harya, M.Pd. for their indescribable dedication.

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- 3. Mr. Dr. Dedi Irwansyah, M. Hum, my sponsor.
- 4. Mrs. Trisna Dinillah Harya, M.Pd. My co-sponsor.
- 5. All of my lecturer in English Education Department

This undergraduate thesis has many weaknesses. The researcher sincerely waits for the suggestion from the readers. Hopefully this research proposal can be benefit to all of us.

Metro, 04 October 2019

Andri Prayoga 1501070149

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#### **CHAPTER I**

#### **INTRODUCTION**

#### A. Background of Study

The rapid changes of information and technology have totally broken the barrier of communication. People are able to interact andconnect to the world with no meaningful obstacle. They can easily out of their national boundaries to find a job, study, build a relation, or just travel around. This phenomenon may become a great chance for Indonesians to show their potential and to learn something because the knowledge gates are broadly opened. In this case, English takes a role as the main bridge linking a person, a group or even a country to others. English makes it possible to exchange information, knowledgeand thought. English is one of lingua franca besides Arabic, French, Japanese, Mandarin and Spanish. Moreover, Englishis the most popular language which has been learned by many nations over the world. Considering the facts above, it is fair to say that learning English is more than important within Indonesia.

To gain success in term of transnational and international interaction, English Language Teaching (ELT) should be given more attention. ELT will decide the direction and the quality of English learning within Indonesia. However, in teaching English there are six aspects which need to pay attention for namelylearning contexts, students'needs, student's ages, learning materials, students' backgrounds, teaching methods and techniques.In teaching the

teachersare to consider the learning context to reach the maximum result. ESL/EFL, Inner Circle Countries, Outer Circle Countries, and Expanding Circle Countries are included in learning context. English as Second Language (ESL) or English as Foreign Language (EFL) is a learning context where the purpose of the study is to improve the student's English abilities or simply it is a study program designed for non-native speakers. The learning takes place on the country where English is the primary language. Inner circle countries such as America, Australia, England, Ireland, and Canada in which English is their mother tongue, with no doubt to say that they have easier path to examine English. The outer circle countries or the common wealth (India, Malaysia, and Singapore) English was brought by colonialism then English becomes one of their official languages. The expanding circle is a phrase to represent the countries where English is neither the first language nor the official language, English is recognized as a foreign language but it is the most popular lingua franca learned by many. Indonesia is one of expanding circle countries; precisely the teachers in Indonesia have heavier challenge in teaching English.

Besides the learning context, determining the student's need is also important. Determining the student's need means the teacher has to see the capability of pupils. This step will ease teacher to formulate what materials have to be learned. The next aspect is the student age. In delivering the material a teacher must think over the age of the students for the more adult the students the better understanding they have. The students'backgrounds are the aspect which cannot be ignored since teacher must approach the apprentice through it. The further aspect is the learning material. It is everything delivered by a teacher whichmust be mastered by the pupils while teaching method and technique are the way how to transfer the knowledge and value from teacher to apprentice.

With reference to ELT aspects within Indonesian context, learning material is one of necessary factors. It is the core of study itself. Up to now, the learning materials in most of vocational high school in Indonesia are too general and it does not cover what the students really need. The vocational high school students (especially the computer network engineering students) have dissimilar necessities of English than those in regular senior high school. Supposedly the learning materials are designed in a more specific form. It is not only to answer the pupils' needs but also to help them in understanding. The word "Tab," for little sample, cannot be translated into "lebel/biaya," in computer network engineering it means "alenia." This translation will never be discovered in the common book provided by the government.

Christina *et al.* report that both specific and general English required to be taught at the same time. In order to in line with the pupils needs, the related material and competent teacher becomes the panel of the student encouragement<sup>1</sup>. According to Retno*et al.* analyzing the students' needs was the main pace of the research. Based on the student's field the learning material (specifically in speaking) must be designed properly to encompass the needs of

<sup>&</sup>lt;sup>1</sup> Christina et al., "Developing Task-Based English Teaching Materials for Business and Management Vocational High School" (English Language Study Program in Teacher training and Education Faculty of TanjungPura University, 2016) p. 14

the pupils<sup>2</sup>.Blanka argues that the learning material clearness and concision should be given more concern and it has to be a defiance of intellectual<sup>3</sup>.Andi*et al.* state that in conveying information and skill to the learners, the learning material is really worthwhile<sup>4</sup>. Burdovaasserts that the running of the subject and the value of the lesson are decided by the selecting material. The right material will assist the teacher to arrange the course and moreover it can help both teachers and learners in learning process<sup>5</sup>.

Numerous researchers have developed the learning materials yet a few people take a notice on developing English learning material for computer network engineering student within Indonesian context. Therefore the researcher aims to solve this matter by designing the material which is suitable to vocational high school particularly in computer network engineering department.

<sup>&</sup>lt;sup>2</sup>Retno et al., "Developing English Speaking Material for Tenth Grade Students of Hotel Accomodation Study Program at SMKN 1 Sukadana," Department of English, Faculty of Teachers Training Education, Lampung University, 2017. P. 8

<sup>&</sup>lt;sup>3</sup>BlankaKlimova, "Developing ESP Study Materials for Students at a Non-Philological Faculty" 7<sup>th</sup> World Conference on Educational Sciences, (WCES-2015) 05-07 Febuary 2015, Novotel Athens Convention Center, Athens, Greece, p 106.

<sup>&</sup>lt;sup>4</sup>Andi et al., "*The Students' Needs in Developing learning Materials for Speaking Skills in Indonesia*", Journal of Education and Practice, Vol. 4, No17,2013, ISSN 2222-1735, Published by University of Makasar.

<sup>&</sup>lt;sup>5</sup>BurdovaVeronika, "English for Specific Purposes (Tourist Management and Hotel Industry)" Department of English and Literature (Masaryk University, Faculty of Education, 2007) p 10

## Table 1

## The Data of Pre-Survey among the Computer Network Engineering Students of Vocational High School of Teladan Metro

| No. | Student's | Final Exam Score | Category  |
|-----|-----------|------------------|-----------|
|     | Initial   |                  |           |
| 1.  | AG        | 10               | Very Poor |
| 2.  | AR        | 75               | Good      |
| 3.  | BP        | 50               | Poor      |
| 4.  | DP        | 45               | Very Poor |
| 5.  | MH        | 55               | Poor      |
| 6.  | MI        | 25               | Very Poor |
| 7.  | RA        | 40               | Very Poor |
| 8.  | RM        | 25               | Very Poor |
| 9.  | SA        | 90               | Good      |
| 10. | SN        | 40               | Very Poor |

#### Table 2

## The Frequency and Percentage

| No | Score  | Frequency | Percentage | Category  |
|----|--------|-----------|------------|-----------|
| 1. | 82-100 | 1         | 10%        | Very Good |
| 2. | 70-81  | 1         | 10%        | Good      |
| 3. | 50-69  | 2         | 20%        | Poor      |
| 4. | 0-49   | 6         | 60%        | Very Poor |

Source: The final exam score

Based on the table above it can inferred that 60% of the students got very poor grade in final exam test, 20% of the students got poor grade, 10% got good and only 10% got very good grade. It means that 80% of the students failed the exam.

#### **B.** Problem Identification

According to elaboration above, the writer has pointed out several corresponded factors affecting the learning process along these lines:

- 1. *the learning context* of SMK Teladan Metro, it must be given more awareness, by knowing the learning context the teacher will know where the start is;
- 2. *the students' ages* of SMK Teladan Metro, the maturity of the student will result the better understanding of learning;
- 3. *the students needs* of SMK Teladan Metro, this part is seldom investigated by the teacher, most of teacher avoid the pupils needs and force the materials which are not specifically designed;
- 4. *the students' backgrounds* of SMK Teladan Metro, it is more specific on the basic knowledge of the apprentice to decide the starting point of the study;
- 5. *the learning materials* used by the teacher of SMK Teladan Metro, the materials is too general and it does not hit what the students truly need ; and
- 6. *the teaching method and technique* implemented by SMK Teladan Metro. It is about the way how the teacher teach the student and handle the obstacle within the teaching learning process.

#### **C.** Problem Limitation

On this study, the writer determined the students' needs and the learning material used by the teacher of SMK Teladan Metro as the primary intention.

#### **D.** Problem Formulation

The problem formulation of this research encompasses.

- **1.** What are the English learning needs of the computer network engineering students of SMK Teladan Metro?
- 2. What is the English learning materials for the computer network engineering students of SMK Teladan Metro supposed to be?
- 3. What is the internal validity of the developed English learning materials for the computer network engineering students of SMK Teladan Metro?

#### E. Purpose of Research

- 1. Knowing the English learning needs of the computer network engineering students of SMK Teladan Metro
- 2. Designing the English learning materials for the computer network engineering students of SMK Teladan Metro supposed to be?
- 3. Confirming the internal validity of the developed English learning materials for the computer network engineering students of SMK Teladan Metro?

## F. Benefit of Product

The product of this research could:

- a. make the computer network engineering students of SMK Teladan
   Metro feel that this English learning material is linear to their field;
- b. help the computer network engineering students of SMK Teladan Metro to get the specific and effective learning;
- c. assist the teacher of SMK Teladan Metro on teaching and determining the goal of English learning; and
- d. be used as a reference for other researchers taking the researches in line.

#### **G. Product Specification**

- The product of this research embraces 3 units; windows, Bill Gates and Anonymous.
- Every unit of the developed materials will consist of: (a) relevant text,
   (b) language focus, (c) activities and tasks, (d) exercises, and (e) answer key.
- 3. Every unit is equipped with related picture to enrich the illustration of the product that is developed.

#### **CHAPTER II**

#### LITERATURE REVIEW

#### **A.** Theoretical Review

#### **1.** Teaching English as Foreign Language (TEFL)

According to brown Teaching is always linked to learning, it is not only transferring knowledge by delivering the material but also it is a process of assisting, facilitating, conditioning the psychology of the learner and preparing the learning circumstance. The philosophy of education is influenced by the teacher teaching style, method, and classroom techniques<sup>6</sup>. Broughton states that the teacher must be conscious of how the teaching matches into the learning framework and where the teaching runs to obviously show the professionalism of the teacher<sup>7</sup>.

Maxom argues that in classroom setting beyond upper-intermediate advanced level has only some students. The case happens because most of the students have no time and sustainable resources whereas the purpose of TEFL is to generate the apprentices speaking the language as good as the teacher<sup>8</sup>. Nadir and Qin maintains that the quality of teaching and teaching have dissimilar

<sup>&</sup>lt;sup>6</sup>H. Douglas Brown, *Principles of Language Learning and Teaching*, Fifth (Unites States of America: Pearson Education, 2007).

<sup>&</sup>lt;sup>7</sup>Geoffrey Broughton and ProQuest (Firm), *Teaching English as a Foreign Language* (London; Boston: Routledge& K. Paul, 1978),

<sup>&</sup>lt;sup>8</sup>Michelle Maxom, *Teaching English as a Foreign Language for Dummies* (Hoboken, N.J. : Chichester: For Dummies ; John Wiley [distributor], 2009).

definition. In literature review, teaching and its philosophy are examined whilst the quality, even it has a number of factors but still it is indefinable. The area of quality perchance can be confined to certain factors such as achievable objectives of the study. This statement is derived from the economic scarcity theory "Resources are limited." The possibility to explain the quality as whole is almost zero percent because of scarce resources. Quality is a subjective occurrence therefore it is unable to be described objectively and accurately, this is the reason why the area of quality is narrowed down. The quality of teaching here is limited to twelve factors namely classroom environment, assessment, teaching methodology, course content, course requirements and outcomes, subject knowledge, teacher preparation, pace of course, time for the assessment, student respect, student consultation and learning material used. These twelve variables are where the quality of teaching relies on<sup>9</sup>. In all levels of schools English is taught to the pupils as a foreign language. The teacher provides four skills to be mastered by the students; speaking, listening, reading and writing. The students are expected to upgrade their ability at these four basic skills to increase the knowledge and skill of English in daily life<sup>10</sup>.

<sup>&</sup>lt;sup>9</sup>Nadir HussainBhayou and Dr.QinYuyou, "Quality Of Teaching English And Factors Influencing Chinese Students To Prefer English As Their Major In University Education: An Example Of School Of Foreign Languages At Northeast Normal University; China, "European Centre for Research Training and Development UK (Www.Eajournals.Org), International Journals of English Language Teaching, 06 (May 2018): 74–87.

<sup>&</sup>lt;sup>10</sup>SondangManik and May Christiani, "Teaching Vocabulary Using Matching Word on Computer Assisted, Language Learning, "International Journal of English Language Teaching 4 (2016): 26.

It is not debatable that English is lectured in most of school within Indonesia; consequently teaching is no longer about serving the materials to the students. Teaching is also more about transferring the value, conditioning the study whether it is the apprentice or the learning means, collaborating and helping the student in term of study even though the quality of teaching itself is unclearly defined and the resources are limited, it is still a must for the teachers to exhibit the professionalism teaching English as foreign language.

#### 2. Teaching English at Vocational High School

Distia and Dewi hold that the teaching material in vocational high school must be distinct from the material of senior high school where the material is not specific. Vocational high school is designed to provide the students with the skills and knowledge required in the industrial world besides to reach the higher education level. The explanations above show that teaching English in vocational high school is such unordinary matter<sup>11</sup>.

Robertson found that in some vocational high school the speaking material and the purpose of learning speaking are composed accordingly by the teacher as the teachers ponder that each vocational program has students needing different competencies in mastering English practices in line with their job<sup>12</sup>. Sri maintains that the teaching process in each program of vocational high school is demanded to comply the student outlook since the main target of vocational high school is

<sup>&</sup>lt;sup>11</sup>DistiaApriyandini and DewiRochsantiningsih, "An Analysis Of English Teaching Strategies At Vocational High School Of Art," (Semarang: Digilibuns, 2016), 17.

<sup>&</sup>lt;sup>12</sup>Paul Robertson, *"Teachers' Assessment on Students' Speaking Ability in Vocational School"* The Asian EFL Journal July 2018 Volume 20, Issue 7(Asia:English Language Education Publishing, 2018) 263.

focused on education and training program at the bordered area of proficiency. Thereupon specifying the content of English learning is entailed. The output is that the specific English becomes a big crucial matter in the flow of vocational high school teaching learning hence ESP is a solution to complete the particular goal<sup>13</sup>.

Ali *et.al* confirm that in Ethiopian Technical and Vocational Training, to access the modern global technological furtherance require English as the carrier or simply English is the language of technology. Looking at the fact that English competency connects the economy industrialization, thus annihilating English is the same as loosing another crucial and pertinent device. The secondary and tertiary stage of education of Ethiopia utilizes English to convey the instruction. Therefore, the achievement of the learner is affected by the mastery of English<sup>14</sup>. Altmisdort appends that within vocational high school the students and the teachers need the time for self-study since creating different chances verily impress the motivation of the learner in ESP course. The real-life authentic materials also boost the effectiveness on the process of ESP program. Both integratedly and separately the basic language skills can be delivered according to the ESP objectives and general purpose. As the result, the pupils have a paradigm that ESP program could upgrade the reading activities<sup>15</sup>.

<sup>&</sup>lt;sup>13</sup>Sri UtamiDewi, "Syllabus of Vocational High School Based on ESP Approach," Dinamikallmu 15, no. 2 (December 10, 2015): 273

<sup>&</sup>lt;sup>14</sup>Ali, Ahmed, BerhanuFirissa and AmensisaKebedeLegesse. "Investigating the relevance of ESP (English for Specific Purpose) for TVET (Technical and Vocational Education and Training) Colleges in Ethiopia." (2017).

<sup>&</sup>lt;sup>15</sup>GoncaAltmişdört, "A Study On Detecting The Needs In Vocational English Courses And Defining Esp Criteria For A Better Instruction," 2016, 30.

In the line with the quotations above it can be inferred that teaching English in vocational high school is authentically different from teaching English in general high school. The students of vocational high school need English which supports their field specialization. The correspondence between English learning materials with their main major influence the learners' paradigm about learning English, the result is that the motivation of learning English will raise and the teaching learning system will work as it is.

#### 3. Materials Development

Based on the learners' needs analysis Basturkmen argues that the scope of ESP courses is smaller compare to the common ELT courses. He claims that ESP course centralizes neither on personal needs or general interests but is more on the work or study related needs. Air traffic controller, engineering student, science students and businessperson are several specific work and study roles mentioned<sup>16</sup>. Carter and Nunan assert that the teacher training and linguistics applied would be more conical. Moreover, a reasonable increase in qualitative and quantitative research will have a significant impact on understanding the factors that govern the language learning. The efficacious way to correlate the linguistic parts such as language acquisition, sociolinguistics, psycholinguistics, language analysis, discourse analysis and pragmatics is by studying the design, development and learning materials utilization. It also works on increasing the

<sup>&</sup>lt;sup>16</sup>Helen Basturkmen, *Developing Courses in English for Specific Purposes* (Houndmills, Basingstoke, Hampshire; New York, NY: Palgrave Macmillan, 2010).

efficacy of materials and evolving the educator consciousness of choosing the learning methodologies.<sup>17</sup>

McDonough implies that in typical environment some learners need to learn English. This is the reason why the whole purposes of language teaching programs are analyzed. Whether in general, educational or in very peculiar terms these purpose could be asserted. On one side the aims possibly are proposed according to national language policy, in large categories, with a plenty of related implications for curriculum expansion. The small example is the goal of language teaching in Malaysia, as the rise of the needs and as key to wider experience, is to familiarize the society in order to build effective communication. The skills studied must be the means shading the call of language usage<sup>18</sup>. Mazraehno and Mazdayasna on their findings enhance that the recent developed course book absolutely quenches Islamic Jurisprudence Experts. Between the first researcher and the specific specialist have a good cooperation and collaboration which then evolved into team-teaching. Precisely the study was relished by this prominent phenomenon. This kind of study offers the EFL teacher and material developer a logical guideline that is worthwhile in developing materials not only in the Islamic jurisprudence context in other ESAP field<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Carter and Nunan, *The Cambridge Guide to Teaching English to Speakers of Other Languages*, New York: Cambridge University Press, 2001-71

<sup>&</sup>lt;sup>18</sup>Jo McDonough, "*Materials and Methods in ELT, Third*" (John Wiley & Sons, Inc, 2013).

<sup>&</sup>lt;sup>19</sup>Fatemeh T Mazraehno and GolnarMazdayasna, "Developing ESAP Materials: A Case of Graduate Students of Islamic Jurisprudence," Singapore: Electronic Journal of Foreign Language Teaching, 2016-30. Vol. 13, No. 1, pp. 82–111

Puji*et.al* state that virtually in most of vocational high school it is difficult to find the appropriate textbooks which are reliable and research-based. The rare of the textbook itself may become the greatest factor causing the vocational high schools lacks of written resource. Eventually, many of graduated pupils of vocational high school are weak in communication and many of them are rejected or fail to complete the requirement of vacancy requiring English skill. This probably increases the number of jobless. The phenomenon describes the importance of specific textbook in teaching learning, especially in vocational high school. The textbook must be authentic to facilitate the learning processproperly<sup>20</sup>.

Bielousova affirms that in composing the ESP course whether online or face to face, the composer is not allowed to disregard the three principal stages as taking these steps will bring the possibility for the designer to construct the ESP learning material in accordance with target learner necessities. The first step is analyzing the needs of the student to decide the goals of the course. The next step is determining the teaching theory and the last is adjusting the authentic text to assign proper teaching materials<sup>21</sup>. Bellu formulates that Criticizing development in the context of society or socio-economic system, is similarly discussing about improvement of the system both in general condition and specific section. Development refers to any positive and admissible activities. The gradual

<sup>&</sup>lt;sup>20</sup>PujiSumarsono, AgistaWardhani, and RafikaRabba Farah, "The Development of Authentic English Language Teaching (ELT) Textbook of Vocational School," International Journal of English Research, Volume 3; Issue 6; November 2017; Page No. 29-31(Malang:IJER, 2017) 3.

<sup>&</sup>lt;sup>21</sup>RimmaBielousova, "Developing Materials for English for Specific Purposes Online Course within the Blended Learning Concept," TEM Journal; Vol 6, No 3, 2017. ISSN 2217-8309, 2017

activities executed by a person or some officials that have working plan schemes to obtain betterment or profitable conditions in both policies and investments are the reason why development takes places.<sup>22</sup>

Richards claims to invent the instructional language teaching material of which the rate is effective, the developer needs to examine various factors such as the teacher factor, it embraces the language expertise, training experience, cultural background and the favorite teaching style. The next factor is learner factor; it consists of what type of study expected by the learner, the student learning necessities, the readability and motivation of the learner. The last is contextual factor; it is about school culture, the circumstance of the class, and the existence of teaching resources in which the materials are implemented<sup>23</sup>.

Tomlinson supports that contemplating the language teaching principles are the certainty to develop classroom materials. The needs and the wants of the apprentices have to be fulfilled by the teaching; it is the core of teaching principles. The most important principle of developing materials is that the teachers are able to apply the written materials as reference instead of rigid provision<sup>24</sup>.

Derived from those theories, it is safe to argue that to develop the teaching and learning materials require some aspects to be thought over. Those aspects are; the

<sup>&</sup>lt;sup>22</sup>Bellù, Development and Development Paradigms A (Reasoned) Review of Prevailing Visions, EASYPol Module 102, May 2011

<sup>&</sup>lt;sup>23</sup>Jack C. Richards, "Materials Development and Research—Making the Connection," RELC Journal 37, no. 1 (April 2006): 5–26,

<sup>&</sup>lt;sup>24</sup>Brian Tomlinson, "Principles and Procedures of Materials Development for Language Learning," 2010, 9.

necessities and the expectation of the pupils, the proficiency of the teacher, the availability of the resource, and the contextual factors. The product of the research should be in a form of authentic forms to support the learning process.

## 4. Activity and Task

According to Nunan the specification of four elements in teaching such as the purpose, the input (linguistic or otherwise) the activities based on the input and the roles indicated for the teacher and learners are demanded to interpret the language learning task<sup>25</sup>. Nunan enhances that indeed the students' expectations of the input are specified by the activities. Besides, the basic essence of the learning is also influenced by the will of the students. He ensures that before inspecting several particular activity examples the teachers have to indicate the three regular ways of characterizing activities such as the practice for the real world, skills use, and fluency or accuracy<sup>26</sup>.

Georgiou and Pavlou hold that activities are something assisting the learners to work out with peculiar case whether linguistic, encyclopedic, transfer or professional. Consequently activities are conceived as a tangible and concise exercise<sup>27</sup>. A series of activities with the identical general purpose and ultimate result is determined as task. It mostly needs some stages to settle the task and in every stage the activities run in the same direction to reach the similar result. The

<sup>&</sup>lt;sup>25</sup>David Nunan, *Designing Tasks for The Communicative Classroom*, Fifth (United Kingdom: Cambridge University Press, 2001).

<sup>&</sup>lt;sup>26</sup>Ibid.

<sup>&</sup>lt;sup>27</sup>Sophie Loannou Georgiou and PavlosPavlou, *Assessing Young Learners* (Oxford University Press, 2003), 22.

procedural (know how) and declarative (know what) are rehearsed within the process of completing the task, moreover it is also investigated<sup>28</sup>.

Sultana indicates that the several forms interactions are stimulated by the activities of actualizing the language communicative value. The learner language skills in many levels support the learners' interaction through the teamwork, meaning negotiation and build up peer relation. In fact, someday learners must work collaboratively in their real life. When learners work in groups to do tasks, it means they are preparing themselves. To empower the relationship between learners and their colleagues or with their teachers, sociolinguistic competencies are developed. After further examination, the average groups turn active in participating learning activities in the classroom, they participate in the activities presented by the teacher. Learners even apply vocabularies related to and in accordance with their majors. They try to exchange ideas using meaningful sentences<sup>29</sup>.

In accordance with Javid it has been underwritten that most of ESP consumers are adulthood or the people within the level of intermediate or advanced entailing English to accomplish the profession or preparing English skill to face the challenge of their future profession related to communication. The process of selecting the learning content, the curriculum development, and teaching methodology must implicate the learners as well to secure the optimal commitment and motivation of the learner within the program. In these affairs

<sup>&</sup>lt;sup>28</sup>Georgiou and Pavlou, 23.

<sup>&</sup>lt;sup>29</sup>Shahin Sultana, "Design Of Materials And Tasks For Making Esp Classes Interactive" 13, No. 37 (2013): 7.

ESP is not supposed to curtail the scope on instructional setting but allow the learners to do self-access study, group work, and cooperative learning<sup>30</sup>.

Chamberlain and Baumgardener formulate that the learner should be nurtured as an active participant during the learning instead of knowledge passive receiver. Nevertheless, the actual meaning of "active" in this circumstance needs to define accurately. Literally there are two kinds of activity; the activity regarding to body movement to encode or decode the communication signal or *Psycho-motor Activity* and the activity where the brain process the information of what is heard, red, spoken and written or simply it is called *Processing Activity*. There is no classification constructed in traditional approach of language teaching as audio lingual method. Because psycho-motor activity was believed as the only one activity existed, thus the nature of audio lingual method was questioned. The parameter of activity is not only pertaining to the number of what learners speak and write as the reality shows that processing activity is the most matter. It is about how much the learners review and consider what and how to do it independently<sup>31</sup>.

Ahmed holds that becoming the ESP teachers is not as simple as general English teachers. The duties are more composite and liable such as preparing the materials, scheming the syllabus, cooperating with course experts, organizing the research and assessing the course along with the students. The teachers have to hold legitimate concepts of the course content and also be adaptive toward the

<sup>&</sup>lt;sup>30</sup>ChoudharyZahidJavid, "English For Specific Purposes: Role Of Learners, TeachersAnd Teaching Methodologies," 2015, 18.

<sup>&</sup>lt;sup>31</sup>Dick Chamberlain and Robert J Baumgardener, *ESP in The Classroom Practice and Evaluation*, vol. ELT 128 (Modern English Publications in association with The British CouncilBritish Council, 1998).

apprentices; on the other hand the teachers should pay attention on the goals of the course. High performance working is the characteristic which must be owned by the professional ESP teachers. They must perform effectively and efficiently in other professional sector without wasting much time. Carrying the prominent means, frameworks and principles of the subject and the design of implementing them to the new materials are the main job of ESP teachers. It does not mean that the teacher are mastering the whole field, the main point is that the teachers are specialized in teaching English<sup>32</sup>.

Elzbieta*et.al* hold that the composition of pedagogical task is the most imminent and feasible context carried from the real world task. In term of rehearsing the sensibility of the language, several traditional trainings provide good breakthroughs. Unfortunately, the traditional model has less precision in evolving the skill to utilize the real-time communication language effectively. The communicative language teaching is highly influenced by the tasks. In practicing the elements of language presented through more traditional tools (task supported teaching), the task can be empowered as a source that provides context while in introducing new content (task based teaching), the task is the only instrument that is possible to use<sup>33</sup>. Morales maintains that evaluating related activities to answer the call of communicative ESP elements becomes a crucial thing throughout the circulation of the task. Since the activities support the students to extend the communicative proficiency within the range of real-life state and authenticity, as

<sup>&</sup>lt;sup>32</sup>Mohammad Kaosar Ahmed, "The ESP Teacher: Issues, Tasks and Challenges" 15, no. 42 (2014): 34.

<sup>&</sup>lt;sup>33</sup>ElzbietaJendrych and HalinaWisniewska, "ESP: How to Design Challenging Tasks for Adult Learners,", 5.

it has been investigated, it can be used for fulfilling the gap of the tasks. Peer work and group work play the role as the path for the student to complete these tasks. The students performances need to be inspected hence the teachers are suggested to walk around the class. The teachers are permitted to assist the pupils but prohibited to tell the students about the fallacies. Overall, during the circulation of the task, spontaneous language output in the small group is the demanded result<sup>34</sup>. In addition Wilis maintains that Task is a communicative activity focused on the purpose with specific result. The main point of task is not in the area of producing a particular language shape but is more on meaning switching. The integral piece of reaching the aim is influenced by the skill practice. Task can be divided into six part within the scope of open tasks and closed tasks<sup>35</sup>.

Derived from those quotations it is worth noting that the appropriate activities and tasks will bring a great impact on the learners' point of view about learning English. It reduces the learners' mindsets that English is difficult and boring. The teacher's roles are not only about presenting and explaining the materials but also scheming the syllabus, preparing the material, and cooperating with the course expert. The teachers must be really careful in designing the activity by considering the needs of the learners both psychological needs and academicals field needs.

#### 5. Assessment

<sup>&</sup>lt;sup>34</sup>LucíaVillanea Morales, "Putting into Practice Gap Tasks in an ESP Classroom for Medicine Personnel at Universidad de Costa Rica, "InterSedes 18, no. 38 (March 8, 2018), <sup>35</sup> Luca Willia A Eremenerels for Task Passed Learning, Addison Wesley, Learning, Learning, Learning, Learning, Learning, Learning, Addison Wesley, Learning, Addison Wesley, Learning, Learning

<sup>&</sup>lt;sup>35</sup> Jane Willis, A Framework for Task-Based Learning, Addison Wesley Longman Limited, 1996-26-27

According to ÿelik and Topkaya there is no a good teaching with no evaluation in it. ESP course is assembled by considering the way of obtaining the information related to rehearsal effect on the learning of the apprentices, the procedure of decoding the information and how to react and take a decision about what to do after knowing the result. Evaluation is useful because it provides the teacher with the feedback to be thought over. Therefore the, school have a chance to refine the school grade. By conducting evaluation the teachers are able to the strength and weakness of their teaching. The evaluation helps the school council to carry out both summative and formative decision. Relatively the evaluation is a necessary for the teacher to be a good educator<sup>36</sup>.

The lack of instrument to evaluate the course becomes a big problem in teaching. Regarding to this issue, some data collection techniques are chosen to be the alternatives such as conducting survey, giving questionnaires, holding formal and informal interviews, observations and checklist. The primary intention of evaluation is gaining the information in accordance with the teaching-learning process by implementing the compatible mixture of the mentioned alternative; subsequently the quality improvement could be achieved. To point out the congruence between the methodology utilized in ESP reading skill, the course aim and the student necessities, the recent research apply an implicit, formative, and outsider course evaluation<sup>37</sup>.

<sup>&</sup>lt;sup>36</sup>Handan ÿelik and EceZehirTopkaya, "Evaluation of the Methodology of an ESP Reading Skills Course for Undergraduate Medical Students: Outsider Perspective," *Procedia - Social and Behavioral Sciences* 232 (October 2016): 326–31, <sup>37</sup>*ibid* 

Graves states that assessment can take two forms (formative and summative). To evaluate the learners understanding, how excellent the learner practice the material, what is their strength and weakness, what suggestion the learners need and how match the materials to their need. The teachers are recommended to implement formative assessment. In dealing with the end of the course, to give the learner the report of their studies, and evaluating the whole course over the semester, the teachers are advised to apply the summative assessment. Evaluating the students' leading can be interpreted that the teacher appreciate the students effort in learning within the course and assessing the course it means you pay attention about your diligence with honor in designing the course<sup>38</sup>.

The importance of evaluating in improving both general courses and ESP is not questionable, especially in terms of continuous improvement. However, research that discusses how to evaluate ESP courses is very rare.<sup>39</sup>. to strengthen synchronization between learning and the needs of students and also the goals of students, evaluations that are integral components of learning are considered important to be evaluated. The students need ESP textbooks to develop their potential in the future in their work will be very useful. Especially in society, English is a foreign language<sup>40</sup>.assessment and evaluation play a very important role in the success of ESP learning. There are several factors that need to be

<sup>&</sup>lt;sup>38</sup>Kathleen Graves, *Designing Language Courses: A Guide for Teachers*, ed. Donald Freeman (Canada: Heinle&Heinle, 2000).

<sup>&</sup>lt;sup>39</sup>Handan Çelik, "A Closer Look Into An ESP Course Through Students' End-Of-Course Evaluations: A Case Study," *Journal of Teaching English for Specific and Academic Purposes* 6, no. 1 (March 8, 2018): 125,

<sup>&</sup>lt;sup>40</sup>Amin Karimnia and Fatemeh Mohammad Jafari, "Critical ESP Textbook Evaluation: The Case of Visual Arts Textbook," *Sustainable Multilingualism* 11, no. 1 (November 27, 2017): 219–36,

evaluated so that ESP has a significant impact on learners. These factors include psychological stability and available resources. Not only that the learners must also be evaluated in the skill of listening, speaking, reading, and writing considering that each of these skills has its own characteristics. This is intended so that later the abilities that the learners have can be in accordance with the needs of the job.<sup>41</sup>

Evaluation, assessment and testing have their own definition or simply they are not identical. Misconceptions and confusions are often happen in interpreting the terms, moreover it alternately utilized. Assessment and evaluation are more general and more conventional than testing. Assessment has many parts, one of them is testing. Evaluation is an activity done to measure whether the language program is applied successfully and hit the target. It can be committed by gathering relevant information from the opinions of the parents and teachers, the grade of textbooks, exam results, and the behavior of the pupils. There are some equipments in evaluation process such as tests, question sheets, textbook analysis and surveillance. Assessment is performed via several instruments both formal and informal. It is a term employed to accumulate the whole method of gathering information. The procedures used in assessing the learners performance is testing. The test purpose is to confirm, for the sample, the learners' understanding of written text, ensuring that the learning objectives are

<sup>&</sup>lt;sup>41</sup>Ali Siddiqui, Rosy Illyas, and Rehana Ali Jokhio, "Defining the Role of Assessing Strategies to Evaluate Individual Language Differences within ESP Students," *International Journal of Language and Literature* 5, no. 2 (2017).

accomplished by the learners. Assigning the rate according to quantifiable outputs and using exercise are the parts of testing<sup>42</sup>.

Patel and Jain verify that the parents, the headmaster and the classroom teacher or even the district education officer feel interested in the students study results or achievements and the importance of the study. English is delivered by the educator with the expectation that the students' comprehension and the capability to express are advanced. According to those reasons evaluation is confirmed notable in English language teaching<sup>43</sup>.

In addition Nunan assures that evaluation and assessment are often applied alternately. The obviousness is that both of them are two different things. Evaluation has a wider scope than assessment in which it discusses about gathering and deciphering information procedures that consist of learners' comprehensions within the language. Afterwards, the information is used in determining the curriculum. It is clearly seen that the datum are accumulated by using some methods. Those methods are today recognized assessment. This explanation suddenly infers that assessment is an instrument of evaluation; in addition assessment takes many forms to support evaluation for example testing. Furthermore, evaluation, assessment and testing affect one another in education system and they can be implemented whenever the time is and wherever the place is within the curriculum boundaries. The concrete example takes place when a curriculum developer formulates the assessment instrument of needs to gather the

<sup>&</sup>lt;sup>42</sup>Georgiou and Pavlou, Assessing Young Learners.

<sup>&</sup>lt;sup>43</sup>M. F Patel and Praveen M Jain, *English Language Teaching (Methods, Tools & Techniques)* (Jaipur India: Sunrise Publishers & Distributors, 2008).

data at the outset of curriculum programming process. The developer is allowed to ask assistance from the partner to validate these components<sup>44</sup>.

## **B. Related Studies**

According to Bran who conducted the study about Course Design for Medical English at University of Medicine in Bucharest implies that the dissimilar needs of the student become the challenge for the educators to compose the course of English for specific purpose (ESP). In the process of designing the course there are supposedly some problems faced by the developers, this study intend to serve those matters get along with the breakthrough to communicate with the medical students. Some of the students are taken as the example of analyzing the needs. This activity is conducted to formulate the learning materials based on the learners needs and to optimize the course plan. The data accumulated are recapitulated in this study and it reflects the creating of fresh and modern materials first step<sup>45</sup>.

In accordance with Ratna who held the research about The Need of ESP Course in Communicative Speaking Skill at SMK PariwisataKosgoro at JIPerjuangan Cirebon found that the students of vocational high school are set to meet the need of a specific job. Therefore creating such genuine ESP course is

<sup>&</sup>lt;sup>44</sup>David Nunan, *Task-Based Language Teaching*. (Cambridge, GBR: Cambridge University Press, 2010),

<sup>&</sup>lt;sup>45</sup>Bran, Elena, "*Course Design for Medical English*", Research and Science Today, No. 2(14)/2015

demanded by the students especially in communicative speaking proficiency. Applying that ESP in vocational high school will surely help the students to prepare them to face the job since speaking is the absolute needs in the in the requirement of job vacancy. The two fundamental principals such as theoretical and pragmatics are used in designing the approach of ESP course. Some students of SMK PariwisataKosgoro at JIPerjuangan Cirebon are chosen and given some tests to measure how much the students realized that to increase the quality of English communicative speaking proficiency they need ESP course. The quantitative method is utilized in this research<sup>46</sup>.

Conforming to Yunita and Pratiwi who conducted research about Developing English Program for Elementary School Teacher Education Students affirms that the assertion of understanding several references in English form induces how importance English to be learned by the students of Elementary School Teacher Education. Consequently the materials presented in the program must be locked on the reading skills. Presentation, practice and productions were the teaching and learning procedure used within the program. The findings exhibit that the students are able to practice English in line with the field properly. It indicates that the English program is executed effectively<sup>47</sup>

Regarding to Suyadi who conducted the research about English for Specific Purpose for Accounting Student at Accounting Department of Jambi

<sup>&</sup>lt;sup>46</sup>RatnaMuntiningsih, "The Need OfEsp Course In Communicative Speaking SKILL" 2, no. 2 (2015): 11.

<sup>&</sup>lt;sup>47</sup>RatnaYunita and NaningPratiwi, "Developing English Program for Elementary School Teacher Education Students," *International Journal of Learning and Teaching*, 2017, 176–83,

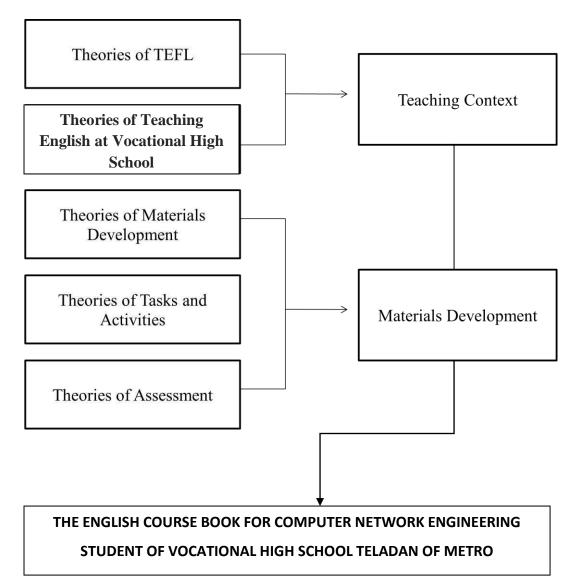
University found that the future profession puts English as one of the requirement and English is used differently in each profession. Hence the accounting students must have specific English learning materials to deal with the free trade area besides the specific knowledge in accountancy. The general English becomes inappropriate to be taught in the classroom for it does not fulfill the field's needs and complicates the students to overcome the problems to be<sup>48</sup>. According to Gultom, who conducted his research about developing English Learning materials for nursing students at Borneo University the teaching and learning quality of nursing students are highly influenced by the specific English learning materials; therefore the educator must formulate the learning material according to the necessities of the pupils. Both English learning materials at fourth semester and the extracurricular materials should be planned carefully, for this reason the Head of Nursing Department has to support and facilitate the lectures<sup>49</sup>.

From the quotations above it can be inferred that the existing materials cannot covers the students' needs for its generality. Developing English materials for the specific filed will significantly help the students in familiarizing English and boosting the students' motivations in learning English as they know that there is a correlation between their future profession and the English learning materials.

<sup>&</sup>lt;sup>48</sup>Suyadi, "English for Specific Purposes for Accounting Students," *International Journal of Innovation and Research in Educational Sciences* 3, no. 2 (2016): 144–48.

<sup>&</sup>lt;sup>49</sup>UliAgustinaGultom, "Developing English Learning Materials For Nursing Students Of Borneo University Of Tarakan," 2016, 11.

# C. Framework



### CHAPTER III

### **RESEARCH METHOD**

## A. Type of Research

This study involves Research and Development (R&D) model intended for developing and validating the educational product. Within this research, the educational product is defined as learning materials. R&D, according to Gall and Borg, brings a significant advancement of education for its tight correlation between program development and systematic program evaluation<sup>50</sup>.

Soenarto*et.al* supports thatR&D is a study where the practitioners intend to create a product giving them a benefit interm of improving the working performance quality and overcoming the problem within the company or institute. Initiation and internal motivation of the practitioners are highly required in this research in order to increasing the working performance. The real problem faced by the teachers and lecturers is the reason why R&D in education context takes place. It is found by doing a reflection amongst the educators and interaction analysis between the teachers and the apprentices in the class and laboratory<sup>51</sup>.

<sup>&</sup>lt;sup>50</sup> Meredith D. Gall *et.al. Educational Research.7*<sup>th</sup> *Edition*. (United States of America: Pearson Education,2003). ISBN 0-32-0889-7.

<sup>&</sup>lt;sup>51</sup>Soenarto*et.al*.MetodePenelitianPendidikan. Editor: SitiIrineAstutiDwiningrum. (Yogyakarta: UNY Press, 2013) ISBN 978-602-7981-00-3

In Addition, Sugiyono extracts R&D model into three levels as follows :

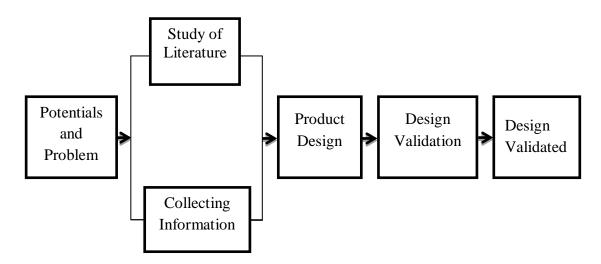
- level 1, the scope of developing the product is limited at the internal validity (expert opinion and practitioners);
- level 2, the researchers validate or test the effectiveness, efficiency, and practicality of using existing products instead of developing the product; and
- 3. level 3, the researchers develop the product and do both internal and external validation.<sup>52</sup>

From the quotations above it is safe to say that the main purpose of R&D is developing and validating the educational product which is useful for advancing the working performance quality and solving the problem encountered by teachers and student within a peculiar institution.

<sup>&</sup>lt;sup>52</sup>Sugiyono, *MetodePenelitianKuantitatifKualitatifdan R & D*, Bandung: Alfabeta, 2015, 454.

## **B.** Research Procedures

The research procedure in this study adopts Sugiyono R&D first level model shown below.



1. Planning

This step is focused on reviewing the related literature of instructional design, collecting the information, determining and stating the objectives, stipulating the course sequence, specifying the skills and testing the small-scale feasibility.

2. Developing Product Preliminary Form

This phase deals with composing the Course Book unit and accompanying teachers' guide.

3. Validating

This process requires the consideration of the experts and practitioners.

## 4. Revising

The preliminary form of the product must be revised based on the suggestion given by the experts and practitioners.

## C. Data Collection Technique and Instrument Research

Questionnaire of needs analysis, and interview are applied in this research. The researcher will do an interview some students as the proxy and English teachers to empower the data. To support the data, documentation will be taken place on the archive of previous year. To detect the students' strength and weakness the questionnaire will be allotted to the students. Furthermore, the data from these activities will be the components to determine the students' needs. The table below shows the data collection techniques and the instrument of the research.

| No. | Stages     | Research Instrument                                       |
|-----|------------|---|
| 1.  | Planning   | Documentation, needs analysis questionnaire and interview |
|     |            | guide   |
| 2.  | Validating | Product evaluation sheet                                  |
| 3.  | Revising   | Focus group discussion                                    |

Table 3. data collection techniques and the instrument of the research

# D. Data Analysis Technique

The data from planning stage are examined by using frequency and percentage. The proper material will be decided in accordance with the highest frequency and percentage from the option.

### **BAB IV**

# **RESEARCH AND DEVELOPMENT RESULT**

#### A. The Result of Developing English Learning Materials

1. The English learning needs of the computer network engineering students of SMK Teladan Metro.

The researcher extracted the student needs from the collected data acquired through two research instruments as follow.

## a. Interview

In pursuance of the interview on August 06, 2019 with Mrs. Gita, S.Pd, the English teacher of vocational high school Teladan Metro, the researcher had marked some information.

- > The students have a paradigm that English is difficult to learn.
- The students have a passion to learn English but some pupils get difficulty on reading, grammar and listening.
- $\blacktriangleright$  The learning materials is created based on the 2013 curriculum.
- The English learning materials within the 2013 curriculum are too general and less-related to the computer network engineering.
   The learning materials are not applicable for their profession.
- > The teacher has not made such as module and course book.

The good English course book should follow the 2013 curriculum form and it must relate to the computer network engineering department since English used based on the place.



Picture 1. Interview with English teacher of Vocational High School Teladan of Metro

## b. Questionnaire

August 07, 2019, the researcher created the questionnaire consisting of 19 statements in Google form then copied the provided link in the system. The researcher transmitted the link to 10 students of Vocational High School Teladan. Here are the resume of the questionnaire result (diagrams are accessible on the appendix).

| No. | Statement  |     |     | Score |     |     |
|-----|--|-----|-----|-------|-----|-----|
|     |  | 1   | 2   | 3     | 4   | 5   |
| 1   | The recent English course book is less correlated to the field of TKJ.         | 0%  | 0%  | 10%   | 80% | 10% |
| 2   | English lesson within SMK must be adjusted to the field of TKJ.                | 0%  | 0%  | 20%   | 70% | 10% |
| 3   | English course book supports the study.  | 0%  | 0%  | 0%    | 50% | 50% |
| 4   | English course book looks more attractive with some pictures.                  | 0%  | 0%  | 20%   | 50% | 30% |
| 5   | The learning topic must be adjusted to the field of TKJ.                       | 0%  | 0%  | 50%   | 50% | 10% |
| 6   | Some proverbs and interesting fact are needed in the course book.              | 0%  | 0%  | 10%   | 70% | 20% |
| 7   | A good English course book will enable<br>the student to study independently.  | 10% | 0%  | 10%   | 60% | 20% |
| 8   | A colorful English course book is more interesting.                            | 0%  | 0%  | 40%   | 50% | 10% |
| 9   | Formal fonts demotivate you to study.  | 0%  | 40% | 10%   | 40% | 10% |
| 10  | Vocabulary list ease the student to understand the text.                       | 0%  | 20% | 10%   | 60% | 10% |
| 11  | The learning material is available for practice.                               | 0%  | 10% | 20%   | 70% | 0%  |
| 12  | The multiple choice exercise interesting.                                      | 0%  | 0%  | 10%   | 80% | 10% |
| 13  | The essay exercise is needed in the course book.                               | 0%  | 10% | 10%   | 60% | 20% |
| 14  | The filling the blank is attractive exercise.                                  | 0%  | 10% | 10%   | 80% | 0%  |
| 15  | The exercise is more fun in the form of rearranging the random sentence/phrase | 0%  | 0%  | 30%   | 70% | 0%  |
| 16  | Some games are needed in English learning.                                     | 10% | 0%  | 20%   | 20% | 50% |
| 17  | True and false exercise is interesting to do.                                  | 0%  | 10% | 20%   | 80% | 0%  |
| 18  | The English learning material should   | 0%  | 0%  | 0%    | 70% | 30% |

 Table 4. Questionnaire Result Percentages

| suppo                | rt your future carrier n                      | eeds.  |                            |         |   |  |
|----------------------|---|--------|----------------------------|---------|---|--|
| *Note<br>5<br>4<br>3 | :<br>: Strongly Agree<br>: Agree<br>: Neutral | 2<br>1 | : Disagree<br>: Strongly I | Disagre | e |  |

In accordance with the data on table above, it can be interpreted that from those 18 statements the agreement is >50%. The English course book which is in line with computer network engineering field is truly needed. Those statements are the representation of the materials needs becoming the foundation of developing the English course book for computer network engineering student of SMK Teladan Metro 2. The English learning materials for the computer network engineering students of SMK Teladan Metro

The English learning materials within the course book consist of

three units. The details of the course book are as follows.

- a. Every unit involves the suitable topic for computer network engineering student
- b. Each unit contains vocabulary list for computer network engineering field.
- c. Every unit consists of quotes and interesting facts.
- d. Each unit has relevant pictures and illustrations.
- e. Every unit is completed with the learning outcomes.

| Table 5. Table of content of English learning material for computer network | K |
|---|---|
| engineering student of SMK Teladan Metro                                    |   |

| No. | Unit     | Title      | Skill   | Activity   | Taxonomy      |
|-----|----------|------------|---------|--|---------------|
| 1   | Unit I   | Windows    |         | <ul> <li>Brain storming</li> <li>Analyzing the sentence</li> <li>Word organizing</li> <li>Rearranging the paragraph</li> <li>Answering the question according to the paragraph</li> </ul>                              |               |
| 2   | Unit II  | Bill Gates | Reading | <ul> <li>Acknowledging the personality of the main character within this chapter.</li> <li>Rearranging the paragraph</li> <li>Explaining the word</li> <li>Filling the crossword</li> <li>Filling the blank</li> </ul> | LOTS-<br>HOTS |
| 3   | Unit III | Anonymous  |         | <ul> <li>Brain storming</li> <li>Word organizing</li> <li>Analyzing the<br/>sentence</li> <li>Answering the</li> </ul>   |               |

| question based on     the paragraph     Summarizing |
|---|
|---|

3. The Internal Validity Of The Developed English Learning Materials for The Computer Network Engineering Students of SMK Teladan Metro

To ensure the quality of the product, the validation had been taken place on 9 September 2019. It involves three English experts namely Dr. UmiYawisah, M.Hum, Dr. DediIrwansyah, M.Hum and Ahmad Madkur, M.Pd. Two of them have published an ISBN book and have doctoral degrees.



Picture 2. Product validation

The course book which had been validated and scored was processed by using Aiken's V formula to measure the cogency level. The Aiken's V result is presented in the following table.

| No. | Assessment Criteria                                  | Aiken's V | Remark |
|-----|--|-----------|--------|
| 1.  | Title suitability                                    | 0.833     | Valid  |
| 2.  | Size conformity                                      | 0.833     | Valid  |
| 3.  | Language and vocabulary                              | 0.667     | Valid  |
| 4.  | Material compatibility                               | 0.583     | Valid  |
| 5.  | Material depth                                       | 0.667     | Valid  |
| 6.  | Material accuracy                                    | 0.667     | Valid  |
| 7.  | Material update                                      | 0.833     | Valid  |
| 8.  | Conformity with the level of development of students | 0.500     | Valid  |
| 9.  | Communicative  | 0.583     | Valid  |
| 10. | Accuracy   | 0.583     | Valid  |
| 11. | Demand and unity of ideas                            | 0.583     | Valid  |
| 12. | Presentation technique                               | 0.750     | Valid  |
| 13. | Presentation of learning                             | 0.667     | Valid  |
| 14. | Content layout                                       | 0.750     | Valid  |
| 15. | Content illustration                                 | 0.667     | Valid  |
| 16. | Typography of material                               | 0.667     | Valid  |

Table 6. The Aiken's Recapitulation Result

The table shows the final result of Aiken's V calculation. The assessment criteria which has score >0.500 is valid. In line with the table above there is no assessment criteria less than <0.500. It is worth to note that the course book is receivable. However, the validators gave some suggestions to improve the quality of the course book.

1. Yawisah noted to adapt the language according to the capability of the apprentices, simplify the material and scrutinize the study level.

- 2. Irwansyah noted to revise the writing procedures which can be seen in the appendix.
- 3. Madkur noted to add how and why questions to stimulate the student elaboration skill, use updated materials related to computer network engineering field, add illustration to describe the difficult vocabularies and simplify the reading passages or questions.

## **B.** Product Revision

The suggestion given by the validators become the foundation to revise the course book. The suggestions from the validators are considered possible to execute and help the researcher to upgrade the course book better. The researcher had:

- adapted the materials and the language related to the students' learning ability,
- focused the study level for the second year student, revised the writing procedures such as the word capitalization, grammar, and reference, and;
- added the how and why questions, upgraded one of the topics into the updated one, added some illustration to describe some difficult words.

# C. Research Limitation

The sample size of this reseach may not cover the whole learning needs of the Computer Network Engineering Student. R&D is a new research methodology within IAIN metro therefore; it is difficult to find the related reference especially for developing the English complimentary materials for Computer Network Engineering student. The researcher is unable to confirm whether the questionnaires were answered sincerely.

### **CHAPTER V**

## **CONCLUSION AND SUGGESTION**

## A. Conclusion of the product

In agreement with the English course book for computer network engineering student at SMK Teladan Metro, here are several conclusions of the research.

- 1. The product have been developed according the learning needs of the computer network engineering at SMK Teladan Metro.
- 2. The product is focused on the English learning materials that is related to the computer network engineering.
- 3. The product is targeted on the reading comprehension skill.
- 4. The product is adjusted to the study level of the computer network engineering student at SMK Teladan Metro.

## **B.** Suggestion of the product usage

The product is suitable for the second year of computer network engineering student at SMK Teladan Metro. With some adaptations, the product is possibly used in other school. The product can be utilized as the reference to develop better learning materials.

## Bibliography

- Ahmed, Mohammad Kaosar. "The Esp Teacher: Issues, Tasks And Challenges" 15, No. 42 (2014): 34.
- Altmişdört, Gonca. "A Study On Detecting The Needs In Vocational English Courses And Defining Esp Criteria For A Better Instruction," 2016, 30.
- Andi et al., "The Students' Needs in Developing learning Materials for Speaking Skills in Indonesia", Journal of Education and Practice, Vol. 4, No17,2013, ISSN 2222-1735, Published by University of Makasar.
- Apriyandini, Distia, And Dewi Rochsantiningsih. "An Analysis Of English Teaching Strategies At Vocational High School Of Art," 2016., 17.
- Basturkmen, Helen. Developing Courses In English For Specific Purposes. Houndmills, Basingstoke, Hampshire; New York, Ny: Palgrave Macmillan, 2010.
- Bhayou, Nadir Hussain, And Dr.Qin Yuyou. "Quality Of Teaching English And Factors Influencing Chinese Students To Prefer English As Their Major In University Education: An Example Of School Of Foreign Languages At Northeast Normal University; China." European Centre For Research Training And Development Uk (Www.Eajournals.Org), International Journals Of English Language Teaching, 06 (May 2018): 74–87.
- Bielousova, Rimma. "Developing Materials For English For Specific Purposes Online Course Within The Blended Learning Concept." *Tem Journal; Vol* 6, No 3, 2017. Issn 2217-8309, 2017. Https://Doi.Org/10.18421/Tem63-28.
- Blanka Klimova, "Developing ESP Study Materials for Students at a Non-Philological Faculty" 7<sup>th</sup> World Conference on Educational Sciences, (WCES-2015) 05-07
   Febuary 2015, Novotel Athens Convention Center, Athens, Greece, p 106
- Bran, Elena, "Course Design for Medical English", Research and Science Today, No. 2(14)/2015
- Broughton, Geoffrey, And Proquest (Firm). *Teaching English As A Foreign Language*. London; Boston: Routledge & K. Paul, 1978.

Http://Moxy.Eclibrary.Ca/Login?Url=Http://Ebookcentral.Proquest.Com/ Lib/Oculnu-Ebooks/Detail.Action?Docid=170015.

- Brown, H. Douglas. *Principles Of Language Learning And Teaching*. Fifth. Unites States Of America: Pearson Education, 2007.
- Burdova Veronika, "English for Specific Purposes (Tourist Management and Hotel Industry)" Department of English and Literature (Masaryk University, Faculty of Education, 2007) p 10
- Çelik, Handan. "A Closer Look Into An Esp Course Through Students' End-Of-Course Evaluations: A Case Study." Journal Of Teaching English For Specific And Academic Purposes 6, No. 1 (March 8, 2018): 125. Https://Doi.Org/10.22190/Jtesap1801125c.
- Chamberlain, Dick, And Robert J Baumgardener. *Esp In The Classroom Practice And Evaluation*. Vol. Elt 128. Modern English Publications In Association With The British Councilbritish Council, 1998.
- Christina Sallem, Gatot Sutapa, Wardah. "Developing Task-Based English Teaching Materials for Business and Management Vocational High School" (English Language Study Program in Teacher training and Education Faculty of Tanjung Pura University, 2016) p. 14
- [David\_Nunan]\_Designing\_Tasks\_For\_The\_Communicativ(Bookfi).Pdf," 2001.
- Dewi, Sri Utami. "Syllabus Of Vocational High School Based On Esp Approach."
   Dinamika Ilmu 15, No. 2 (December 10, 2015): 273. Https://Doi.Org/10.21093/Di.V15i2.73.
- Georgiou, Sophie Loannou, And Pavlos Pavlou. Assessing Young Learners. Oxford University Press, 2003.
- Graves, Kathleen. *Designing Language Courses: A Guide For Teachers*. Edited By Donald Freeman. Canada: Heinle&Heinle, 2000.
- Gultom, Uli Agustina. "Developing English Learning Materials For Nursing Students Of Borneo University Of Tarakan," 2016, 11.
- Javid, Dr Choudhary Zahid. "English For Specific Purposes: Role Of Learners, Teachers And Teaching Methodologies," 2015, 18.
- Jendrych, Elzbieta, And Halina Wisniewska. "Esp: How To Design Challenging Tasks For Adult Learners," N.D., 5.

- Karimnia, Amin, And Fatemeh Mohammad Jafari. "Critical Esp Textbook Evaluation: The Case Of Visual Arts Textbook." Sustainable Multilingualism 11, No. 1 (November 27, 2017): 219–36. Https://Doi.Org/10.1515/Sm-2017-0020.
- Manik, Sondang, And May Christiani. "Teaching Vocabulary Using Matching Word On Computer Assisted, Language Learning." *International Journal Of English Language Teaching* 4 (2016): 26.
- Maxom, Michelle. Teaching English As A Foreign Language For Dummies. Hoboken, N.J.: Chichester: For Dummies; John Wiley [Distributor], 2009.
- Mazraehno, Fatemeh T, And Golnar Mazdayasna. "Developing Esap Materials: A Case Of Graduate Students Of Islamic Jurisprudence," Pp. 82–111, 06 (2016): 30.
- Mcdonough, Jo. Materials And Methods In Elt. Third. John Wiley & Sons, Inc, 2013.
- Meredith D. Gall *et.al. Educational Research.7<sup>th</sup> Edition*. (United States of America: Pearson Education,2003). ISBN 0-32-0889-7.
- Muntiningsih, Ratna. "The Need Of Esp Course In Communicative Speaking Skill" 2, No. 2 (2015): 11.
- Nunan, David. *Designing Tasks For The Communicative Classroom*. Fifth. United Kingdom: Cambridge University Press, 2001.
  - *Task-Based Language Teaching*. Cambridge, Gbr: Cambridge University
     Press, 2010.

Http://Public.Eblib.Com/Choice/Publicfullrecord.Aspx?P=4636582.

- Patel, M. F, And Praveen M Jain. English Language Teaching (Methods, Tools & Techniques). Jaipur India: Sunrise Publishers & Distributors, 2008.
- Retno Prabandari, Cucu Sutarsyah, Mahpul Mahpul. "Developing English Speaking Material for Tenth Grade Students of Hotel Accomodation Study Program at SMKN 1 Sukadana," Department of English, Faculty of Teachers Training Education, Lampung University, 2017. P. 8

- Richards, Jack C. "Materials Development And Research—Making The Connection." *Relc Journal* 37, No. 1 (April 2006): 5–26. Https://Doi.Org/10.1177/0033688206063470.
- Robertson, Paul. "The Asian Efl Journal July 2018 Volume 20, Issue 7," N.D., 263.
- Siddiqui, Ali, Rosy Illyas, And Rehana Ali Jokhio. "Defining The Role Of Assessing Strategies To Evaluate Individual Language Differences Within Esp Students." *International Journal Of Language And Literature* 5, No. 2 (2017). Https://Doi.Org/10.15640/Ijll.V5n2a16.
- Soenarto *et.al.* Metode Penelitian Pendidikan. Editor: Siti Irine Astuti Dwiningrum. (Yogyakarta: UNY Press, 2013) ISBN 978-602-7981-00-3
- Sugiyono, *MetodePenelitianKuantitatifKualitatifdan R & D*, Bandung: Alfabeta, 2015, 454.
- Sultana, Shahin. "Design Of Materials And Tasks For Making Esp Classes Interactive" 13, No. 37 (2013): 7.
- Sumarsono, Puji, Agista Wardhani, And Rafika Rabba Farah. "The Development Of Authentic English Language Teaching (Elt) Textbook Of Vocational School," N.D., 3.
- Suyadi. "English For Specific Purposes For Accounting Students." International Journal Of Innovation And Research In Educational Sciences 3, No. 2 (2016): 144–48.
- Tomlinson, Brian. "Principles And Procedures Of Materials Development For Language Learning," 2010, 9.
- Villanea Morales, Lucía. "Putting into Practice Gap Tasks in an ESP Classroom for Medicine Personnel at Universidad de Costa Rica." *InterSedes* 18, no. 38 (March 8, 2018). https://doi.org/10.15517/isucr.v18i38.32676.
- Willis, Jane. "A Framework for Task-Based Learning", Addison Wesley Longman Limited, 1996-26-27
- ÿelik, Handan, and Ece Zehir Topkaya. "Evaluation of the Methodology of an ESP Reading Skills Course for Undergraduate Medical Students: Outsider

Perspective." *Procedia - Social and Behavioral Sciences* 232 (October 2016): 326–31. https://doi.org/10.1016/j.sbspro.2016.10.030.

Yunita, Ratna, and Naning Pratiwi. "Developing English Program for Elementary School Teacher Education Students." *International Journal of Learning* and Teaching, 2017, 176–83. https://doi.org/10.18178/ijlt.3.3.176-183.



### KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI METRO FAKULTAS TARBIYAH DAN ILMU KEGURUAN

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Nomor : B-1355/In.28.1/J/TL.00/05/2019 Lampiran : -Perihal : IZIN *PRA-SURVEY* 

Kepada Yth., KEPALA SMK TELADAN METRO di-Tempat

Assalamu'alaikum Wr. Wb.

Dalam rangka penyelesaian Tugas Akhir/Skripsi, mohon kiranya Saudara berkenan memberikan izin kepada mahasiswa kami:

| Nama     | : ANDRI PRAYOGA   |
|----------|---|
| NPM      | : 1501070149  |
| Semester | : 8 (Delapan)   |
| Fakultas | : Tarbiyah dan Ilmu Keguruan  |
| Jurusan  | : Pendidikan Bahasa Inggris   |
| Judul    | : DEVELOPING ENGLISH COMPLIMENTARY MATERIAL FOR<br>COMPUTER NETWORK ENGINEERING STUDENT AT<br>VOCATIONAL HIGH SCHOOL TELADAN OF METRO WITHIN<br>ACADEMIC YEAR 2018/2019 |

untuk melakukan pra-survey di SMK TELADAN METRO.

Kami mengharapkan fasilitas dan bantuan Saudara untuk terselenggaranya pra-survey tersebut, atas fasilitas dan bantuan serta kerjasamanya kami ucapkan terima kasih.

Wassalamu'alaikum Wr. Wb.

Metro, 18 Mei 2019 Ketua Jurusan Pail Tadris Ban ggris Ahmad Subhan Roza, M.Pd., NR 19750610 200801 1 014



## YAYASAN PENDIDIKAN TELADAN (YPT) SEKOLAH MENENGAH KEJURUAN (SMK) TELADAN METRO TERAKREDITASI

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#### SURAT BALASAN IZIN PRA- SURNEY Nomor: 400/1.12.3/SMKT/A/05/2019

Kepala SMK Teladan Metro dengan ini menerangkan bahwa mahasiswa:

| Nama     | : ANDRI PRAYOGA              |
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| NPM      | : 1501070149                 |
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| Fakultas | : Tarbiyah dan Ilmu Keguruan |
| Jurusan  | : Pendidikan Bahasa Inggris  |
|          |                              |

Benar- benar telah melaksanakan Pra- Survey di SMK Teladan Metro sebagai syarat Penulisan Skripsi, yaitu dengan judul:

"DEVELOPING ENGLISH COMPLIMENTARY MATERIAL FOR COMPUTER NETWORK ENGINEERING STUDENT AT VOCATIONAL HIGH SCHOOL TELADAN OF METRO WITHIN ACADEMIC YEAR 2018/2019".

Demikian Surat Balasan ini diberikan kepada yang bersangkutan, agar dapat digunakan sebagaimana mestinya.





#### **KEMENTERIAN AGAMA** INSTITUT AGAMA ISLAM NEGERI (IAIN) METRO LAMPUNG FAKULTAS TARBIYAH DAN ILMU KEGURUAN

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B-2458 /In.28.1/J/PP.00.9/7/2019 Nomor : Lamp **BIMBINGAN SKRIPSI** Hal

24 Juli 2019

Kepada Yth: 1. Dr. Dedi Irwansyah, M.Hum (Pembimbing I) 2. Trisna Dinillah Harya, M.Pd (Pembimbing II) Dosen Pembimbing Skripsi Di -

Tempat

Assalamu'alaikum Wr. Wb.

Dalam rangka menyelesaikan studinya, untuk itu kami mengharapkan kesediaan Bapak/ Ibu untuk membimbing mahasiswa dibawah ini:

| Nama     | Andri Prayoga   |  |
|----------|---|--|
| NPM      | 1501070149  |  |
| Fakultas | : Tarbiyah dan Ilmu Keguruan  |  |
| Jurusan  | : Tadris Bahasa Inggris   |  |
| Judul    | Developing English Complimentary Materials For Computer Network<br>Engineering Student At Vocational High School Teladan Of Metro |  |
|          | Within Academic Year 2018/2019  |  |

Dengan ketentuan sebagai berikut:

- 1. Dosen Pembimbing, membimbing mahasiswa sejak penyusunan proposal sampai dengan penulisan skripsi, dengan ketentuan sbb:
  - a. Dosen pembimbing 1 bertugas mengarahkan judul, outline, alat pengumpul data (APD) dan mengoreksi skripsi Bab I s.d Bab IV setelah dikoreksi pembimbing 2.
  - b. Dosen Pembimbing 2 bertugas mengarahkan judul, outline, alat pengumpul data (مراتية) dan mengoreksi skripsi Bab I s.d Bab IV sebelum dikoreksi pembimbing 1.
- 2. Waktu menyelesaikan skripsi maksimal 4 (empat) semester sejak SK pembimbing skripsi ditetapkan oleh Fakultas.
- 3. Diwajibkan mengikuti pedoman penulisan karya ilmiah/skripsi edisi revisi yang telah ditetapkan oleh IAIN Metro.
- 4. Banyaknya halaman skripsi antara 40 s.d 60 halaman dengan ketentuan sebagai berikut:
  - a. Pendahuluan ± 1/6 bagian
  - b. Isi + 2/3 bagian
  - c. Penutup ± 1/6 bagian

Demikian surat ini disampaikan untuk dimaklumi dan atas kesediaan Bapak/Ibu diucapkan terima kasih.

Wassalamu'alaikum Wr. Wb.





#### KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI METRO FAKULTAS TARBIYAH DAN ILMU KEGURUAN

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| Nama     | : ANDRI PRAYOGA             |
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| Semester | : 9 (Sembilan)              |
| Jurusan  | : Pendidikan Bahasa Inggris |

Maka dengan ini kami sampaikan kepada saudara bahwa Mahasiswa tersebut di atas akan mengadakan research/survey di SMK TELADAN METRO, dalam rangka meyelesaikan Tugas Akhir/Skripsi mahasiswa yang bersangkutan dengan judul "DEVELOPING ENGLISH COMPLIMENTARY MATERIALS FOR COMPUTER NETWORK ENGINEERING STUDENT AT VOCATIONAL HIGH SCHOOL TELADAN OF METRO WITHIN ACADEMIC YEAR 2018/2019".

Kami mengharapkan fasilitas dan bantuan Saudara untuk terselenggaranya tugas tersebut, atas fasilitas dan bantuannya kami ucapkan terima kasih.

Wassalamu'alaikum Wr. Wb.





#### KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI METRO FAKULTAS TARBIYAH DAN ILMU KEGURUAN

Jalan Ki, Hajar Dewantara Kampus 15 A Iringmulyo Metro Timur Kota Metro Lampung 34111 Telepon (0725) 41507; Faksimili (0725) 47296; Website: www.tarbiyah.metrouniv.ac.id; e-mail: tarbiyah.iain@metrouniv.ac.id

## SURAT TUGAS Nomor: B-2591/In.28/D.1/TL.01/08/2019

Wakil Dekan I Fakultas Tarbiyah dan Ilmu Keguruan Institut Agama Islam Negeri Metro, menugaskan kepada saudara:

| Nama     | : | ANDRI PRAYOGA             |
|----------|---|---------------------------|
| NPM      | : | 1501070149                |
| Semester | : | 9 (Sembilan)              |
| Jurusan  | : | Pendidikan Bahasa Inggris |
|          |   |                           |

Untuk : 1. Mengadakan observasi/survey di SMK TELADAN METRO, guna mengumpulkan data (bahan-bahan) dalam rangka meyelesaikan penulisan Tugas Akhir/Skripsi mahasiswa yang bersangkutan dengan judul "DEVELOPING ENGLISH COMPLIMENTARY MATERIALS FOR COMPUTER NETWORK ENGINEERING STUDENT AT VOCATIONAL HIGH SCHOOL TELADAN OF METRO WITHIN ACADEMIC YEAR 2018/2019".

> Waktu yang diberikan mulai tanggal dikeluarkan Surat Tugas ini sampai dengan selesai.

Kepada Pejabat yang berwenang di daerah/instansi tersebut di atas dan masyarakat setempat mohon bantuannya untuk kelancaran mahasiswa yang bersangkutan, terima kasih.

Dikeluarkan di : Metro Pada Tanggal : 05 Agustus 2019 Mengetahui, Wakit Dekan Pejabat Setempat Dra. Isti Fatonah MA MP 9670531 199303 2 003

### **INTERVIEW GUIDE English Teacher**

 Apa saja kesulitan siswa dalam belajar bahasa Inggris? (What is students' difficulty in learning English?)

Kesulitanya sebenarnya tidak banyak, kalau niatnya anak-anak tu suka sama bahasa inggris dan mau belajar Cuma beberapa anak itu kendalanya biasanya mereka sulit mempelajari reading sama grammar.

 Skill apakah yang menjadi kelemahan siswa dalam belajar bahasa Inggris?(What are the weaknesses of the students in learning English?)

lya reading sama listening.

3. Berdasar pada apakah pemilihan bahan ajar? (What consideration underlies the selection of learning materials?)

Kalau materi ajarnya itu kita print berdasarkan kurikulum, kita kan pakai kurikulum k13 ya dan itu sudah diwajibkan menggunakan k13 semuanya, untuk yang KTSP kan melanjutkan yang kemarin saja.

4. Materi apa yang sering digunakan di kelas? (What materials are often used in the classroom?)

lya materinya itu banyak ada yang berupa teks itu biasanya saya kasih lewat paper atau saya kasih lewat visual, kadang-kadang kita pakai laptop juga. Sesuai dengan kurikulum kemudian disesuaikan dengan materi baru kita siapkan bahan ajarnya.

5. Apakah materi yang diajarkan berhubungan dengan program jurusan? (Are the English learning materials related to vocational subjects?)

Nah kalau menurut saya sih untuk bahasa inggris di k13 ini itu kurang berhubungan sama jurusan kita ini kan TKJ jadi saya rasa semua materi pembelajaran yang ada di bahasa inggris itu hanya mempelajari secara umum bukan bahasa inggris yang mempelajari tentang ke jurusan TKJ tersebut. Jadi kurang konek lah sama pelajaran sama jurusanya. 6. Apakah siswa menggunakan bukupelajaran bahasaInggris? (Do students use English textbook?)

siswa disini menggunakan buku cetak karena diharuskan menggunakan buku cetak kurikulum k13.

7. Pernah tidak ibu membuat semacam modul, course book atau sejenisnya? (have you ever made such module, course book or something like that?)

Sebenarnya saya belum pernah sih membuat seperti itu cuman kalau pas ngajar saya biasa nyiapin sendiri buat pakai laptop atau notebook gitu, saya ambil materi-materi itu saya kumpulkan dari internet. Tapi kalau sampai buat module sendiri belum.

8. Apakah sekolah menyediakan materi pembelajaran bahasa Inggris? (Does the school provide learning materials for teaching English?)

Sekolah itu hanya menyediakan buku untuk lebih lanjutnya guru itu mungkin lebih aktif sendiri berinovasi nyiapin bahan ajar lainya ya sekarang banyak yang bisa kita ambil dari akses apapun kan? Jadi sekolah itu hanya menyediakan buku aja.

9. Apakah materi audio-visual sering diberikan? (Are audio-visual materials often given in the teaching learning process?)

Itu pernah diberikan apalagi kalau misalkan kita materinya yang membutuhkan audio-visual, misalkan seperti listening itu kan perlu nah biasanya kita pakai cuman memang jarang sih karena kan siswanya ga terlalu banyak juga disini jadi pernah digunakan tapi jarang.

10. Apakah lingkungan social masyarakat setempat mempengaruhi proses belajarsiswa? (Are the social environments influence the learning process of the students?)

Kalau selama ini saya disini kayanya masyarakat ga ada pengaruhnya, kayaknya pasif gitu 11. Menurut anda buku bahasa inggris yang bagus itu yang seperti apa?(how would you describe the good English book?)

Yang jelas satu harus sesuai dengan pedoman kita misalkan pedoman kita itu kan k13 sedangkan buku k13 itu kan sekarang ada yang ada dua maksudnya penerbitnya ada beberapa penerbit yang lebih dari satu jadi mungkin yang bagus itu yang isinya kontenya sesuai dengan jurusan kita silabus kita terus lebih baiknya juga nyambung dengan jurusan kita misalkan jurusan TKJ ya kita ada bahasa inggris yang mengarah tentang TKJ supaya nantinya juga ketika anak lulus dari sini dia faseh bahasa inggrisnya. Karena bahasa inggris kan biasanya dimana tempatnya berbeda meaningnya artinya gitu kan, sesuai jurusanya apa gitu, bahasa inggris TKJ dengan bahasa inggris perkantoran pasti beda. Angket Penelitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t... https://docs.google.com/forms/u/0/d/1VoBjPhfPrqVCwlzBSwHj7nu7...

# Angket Penelitian (Tanggapan siswa jursan TKJ SMK Teladan Metro terhadap materi bahasa Inggris)

Berikut ini adalah angket yang berkaitan dengan penelitian pengembangan materi bahasa Inggris di jurusan TKJ. Oleh karena itu disela-sela kesibukan anda kami memohon dengan hormat kesediaan anda untuk mengisi angket berikut ini. atas kesediaan dan partisipasi anda untuk mengisi angket yang ada saya ucapkan terimakasih.

Nama Responden \*

Brayen

Sekolah \*

SMK teladan metro

Nomor WhatsApp

| Angket Penel | litian (Tanggapan siswa jursan TKJ SMK Teladan Metro t             | https://docs.google.com/forms/u/0/d/1VoBjPhfPrqVCwIzBSwHj7nu7 |
|--------------|--|---|
|              | Buku pelajaran bahasa Inggris yang<br>sesuai dengan jurusan TKJ. * | anda gunakan saat ini belum                                   |
|              | Sangat Setuju  |   |
| *            | Setuju   |   |
|              | Kurang Setuju  |   |
|              | 🔲 Tidak Setuju   |   |
|              | 🔲 Sangat Tidak Setuju  |   |
|              | Bahasa Inggris di SMK seharusnya                                   | disesuaikan dengan jurusan TKJ. *                             |
|              | Sangat Setuju  |   |
|              | Setuju   |   |
|              | Kurang Setuju  |   |
|              | Tidak Setuju   |   |
|              | Sangat Tidak Setuju  |   |
|              | Buku pelajaran bahasa Inggris penti                                | ng untuk menunjang belajar siswa.                             |
|              | Sangat Setuju  |   |
|              | Setuju   |   |
|              | Kurang Setuju  |   |
|              | Tidak Setuju   |   |
|              | Sangat Tidak Setuju  | •   |
|              |  |   |

| Angket P | enelitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t        | https://docs.google.com | n/forms/u/0/d/1VoBjPhfPrqVCwl | IzBSwHj7nu7 |
|----------|--|-------------------------|-------------------------------|-------------|
|          | Buku bahasa Inggris lebih menarik                                | jika disertai den       | gan gambar. *                 | • ` < '     |
|          | 🔲 Sangat Setuju  |                         |                               |             |
|          | Setuju   |                         |                               |             |
|          | Kurang Setuju  |                         |                               |             |
|          | Tidak Setuju   |                         |                               |             |
|          | 📄 Sangat Tidak Setuju  |                         |                               |             |
|          | Topik pembahasan di buku bahasa<br>jurusan TKJ. *                | Inggris harus dis       | sesuaikan dengan              |             |
|          | Sangat Setuju  |                         |                               |             |
|          | Setuju   |                         |                               | ŧ.          |
|          | Kurang Setuju  |                         |                               |             |
|          | Tidak Setuju   |                         |                               | э́          |
|          | 🔲 Sangat Tidak Setuju  |                         |                               |             |
|          | Beberapa sisipan kata mutiara dan<br>pelajaran bahasa Inggris. * | fakta menarik pe        | rlu ada di buku               | ÷           |
|          | Sangat Setuju  |                         |                               |             |
|          | Setuju   |                         |                               |             |
|          | Kurang Setuju  |                         |                               |             |
|          | Tidak Setuju   |                         |                               |             |
|          | Sangat Tidak Setuju  | ٠                       |                               |             |
|          |  |                         |                               |             |

| Angket Pen | elitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t https://docs.google.com/forms/u/0/d/1VoBjPhfPrqVCwIzBSwHj7nu7 |
|------------|---|
|            | Buku pelajaran yang baik dapat membantu peserta didik belajar secara mandiri(bila tidak ada guru). *                  |
|            | Sangat Setuju   |
|            | Setuju  |
|            | Kurang Setuju   |
|            | Tidak Setuju  |
|            | Sangat Tidak Setuju   |
|            | Buku pelajaran bahasa inggris akan lebih menarik untuk dibaca jika berwarna. *  |
|            | Sangat Setuju   |
|            | Setuju  |
|            | Kurang Setuju   |
|            | 🗍 Tidak Setuju  |
|            | Sangat Tidak Setuju   |
|            | Jenis huruf yang formal (misal times new roman) menyebabkan anda malas untuk membaca. *                               |
|            | Sangat Setuju   |
|            | Setuju  |
|            | Kurang Setuju   |
|            | Tidak Setuju  |
|            | Sangat Tidak Setuju   |

| Angket Pen | elitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t     | https://docs.google.com/fon | ms/u/0/d/1VoBjPhfPrqVCwIzB  | SwHj7nu7 |
|------------|---|-----------------------------|---|----------|
|            | List kosakata akan membantu sisw                            | a memahami text y           | /ang dibaca. *  |          |
|            | Sangat Setuju   |                             |   |          |
|            | Setuju  |                             |   |          |
|            | Kurang Setuju   |                             |   |          |
|            | 🔄 Tidak Setuju  |                             |   |          |
|            | Sangat Tidak Setuju   |                             |   |          |
|            | Materi yang disajikan pada buku ba<br>dipraktekan *         | hasa inggris memu           | Ingkinkan untuk   | 8        |
|            | Sangat Setuju   |                             |   |          |
|            | 🗌 Setuju  |                             |   |          |
|            | C Kurang Setuju   |                             |   |          |
|            | Tidak Setuju  |                             | 200 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 |          |
|            | Sangat Tidak Setuju   |                             |   |          |
|            | Materi yang ada dalam pelajaran ba<br>dengan jurusan TKJ. * | hasa Inggris TIDA           | ( harus sesuai  | 1.95     |
|            | Sangat Setuju   |                             |   |          |
|            | Setuju  |                             |   |          |
|            | Kurang Setuju   |                             |   |          |
|            | Tidak Setuju  |                             |   |          |
|            | Sangat Tidak Setuju   |                             |   |          |

| Angket Per | nelitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t https://docs.google.com/forms/u/0/d/1VoBjPhfPrqVCwIzBSwHj7nu7 |
|------------|--|
|            | Soal-soal latihan lebih menyenangkan bila berbentuk pilihan ganda. *   |
|            | Sangat Setuju  |
|            | Setuju   |
| •          | Kurang Setuju  |
|            | Tidak Setuju   |
|            | Sangat Tidak Setuju  |
|            | Soal-soal latihan berbentuk essay perlu ada dalam buku pelajaran   |
|            | bahasa Inggris. *  |
|            | Sangat Setuju  |
|            | Setuju   |
|            | Kurang Setuju  |
|            | Tidak Setuju   |
|            | Sangat Tidak Setuju  |
|            | Soal-soal lebih menyenangkan bila dalam bentuk mengisi bagian yang   |
|            | kosong. *  |
|            |  |
|            | Setuju   |
|            | Kurang Setuju  |
|            | Tidak Setuju   |
|            | Sangat Tidak Setuju  |
|            |  |

| Angket Pe | enelitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t https://docs.go | ogle.com/forms/u/0/d/1VoBjPhfPrqVCwIzBSwHj7nu7 |
|-----------|---|--|
|           | Soal-soal latihan lebih menyenangkan dalam b<br>kata/kalimat yang acak. * | entuk menyusun                                 |
|           | Sangat Setuju   |  |
|           | Setuju  |  |
|           | Kurang Setuju   |  |
|           | 🔲 Tidak Setuju  |  |
|           | Sangat Tidak Setuju   |  |
|           | Soal-soal latihan lebih menyenangkan dalam b<br>salah/benar. *            | entuk pilihan                                  |
|           | Sangat Setuju   |  |
|           | Setuju  |  |
|           | Kurang Setuju   | · · · ·  |
|           | Tidak Setuju  |  |
|           | 🔲 Sangat Tidak Setuju   |  |
|           | Beberapa jenis game perlu dimasukan kedalam<br>bahasa Inggris. *          | n materi pembelajaran                          |
|           | Sangat Setuju   |  |
|           | Setuju  |  |
|           | C Kurang Setuju   |  |
|           | Tidak Setuju  |  |
|           | Sangat Tidak Satulu   |  |

| tet Pe | nelitian (Tanggapan siswa jursan TKJ SMK Teladan Metro t https://docs.google.com/forms/u/0/d/1VoBjPhfPrqVCwIzBSwHj7n |
|--------|--|
|        | Materi bahasa inggris di jurusan TKJ harus mendukung kebutuhan<br>karir anda kedepan *                               |
|        | Sangat Setuju  |
|        | 🗌 Setuju   |
|        | Kurang Setuju  |
|        | 🔲 Tidak Setuju   |
|        | Sangat Tidak Setuju  |
|        | Kurang minat   |
|        |  |
|        |  |
|        |  |
|        | Konten ini tidak dibuat atau didukung oleh Google  |
|        | Konten ini tidak dibuat atau didukung oleh Google.   |
|        | Konten ini tidak dibuat atau didukung oleh Google.<br>Google Formulir  |
|        |  |
|        |  |

## Nama Responden

10 tanggapan

## Brayen

Dimas Bayu Permadi

Nova Alfian Ramadhan

Fine Damayati

Ferdian Saputra

Miftakhul

yesaya ari setiawan

Naufal Arby

Qashdan Aqil Al-bajaili

Ricard

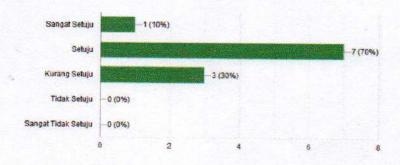
# Nomor WhatsApp

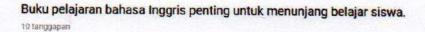
9 tanggapan

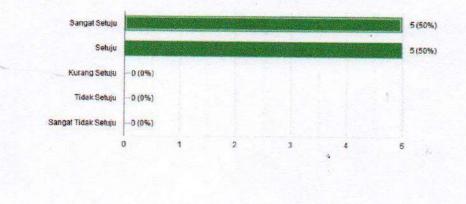
| 082282959348 |  |  |  |  |  |
|--------------|--|--|--|--|--|
| 088276792136 |  |  |  |  |  |
| 081927678157 |  |  |  |  |  |
| 085809157561 |  |  |  |  |  |
| 085609315828 |  |  |  |  |  |
| 085783014101 |  |  |  |  |  |
| 085609031859 |  |  |  |  |  |
| 085766606332 |  |  |  |  |  |
| 085269573459 |  |  |  |  |  |
|              |  |  |  |  |  |



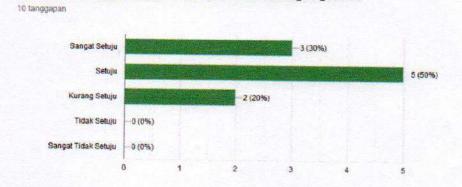
Bahasa Inggris di SMK seharusnya disesuaikan dengan jurusan TKJ. 10 tanggapan



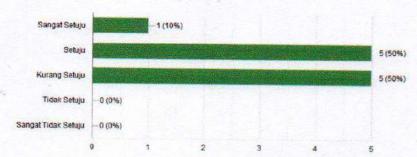




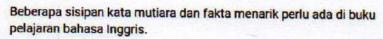




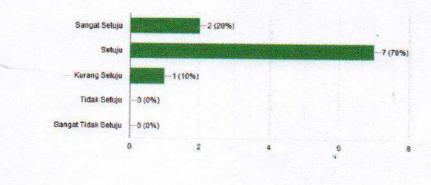
Topik pembahasan di buku bahasa Inggris harus disesuaikan dengan jurusan TKJ.



10 tanggapan

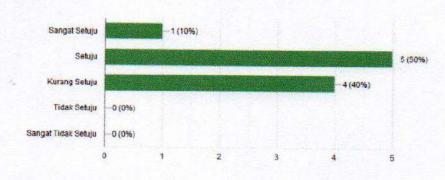


10 tanggapan

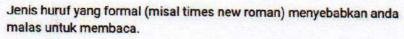




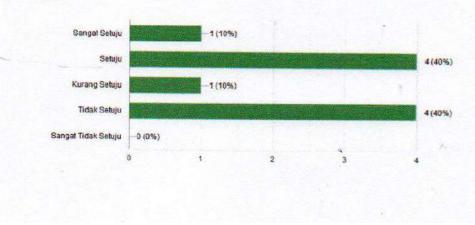
# Buku pelajaran bahasa inggris akan lebih menarik untuk dibaca jika berwarna.



10 tanggapan



10 tanggapan

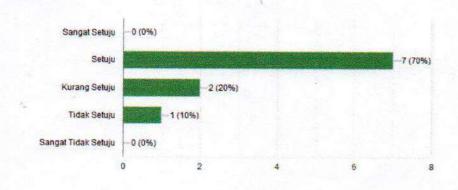


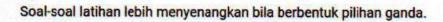


# Materi yang disajikan pada buku bahasa inggris memungkinkan untuk dipraktekan

10 tanggapan

10 tanggapan





 Sangat Setuju
 -1 (10%)

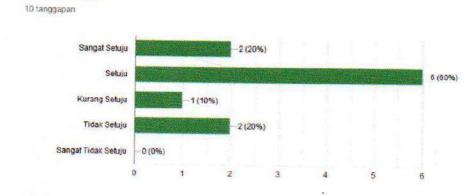
 Setuju
 8 (80%)

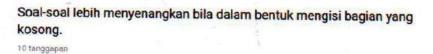
 Kurang Setuju
 -1 (10%)

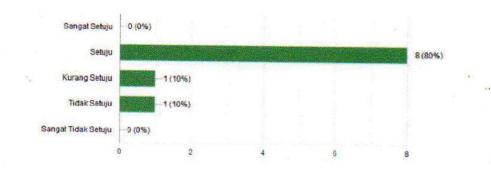
 Tidak Setuju
 0 (0%)

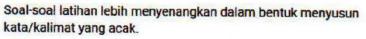
 0
 2
 4
 6
 8

# Soal-soal latihan berbentuk essay perlu ada dalam buku pelajaran bahasa Inggris.

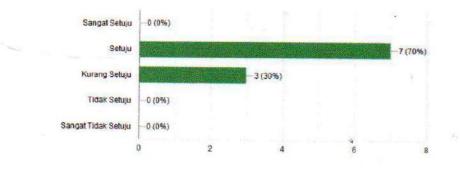


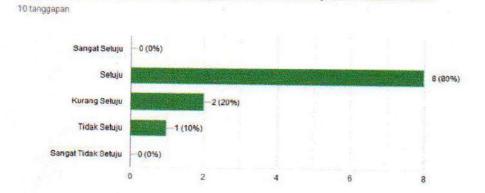






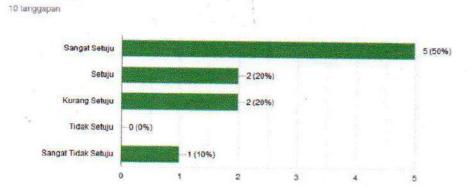
10 tanggapan





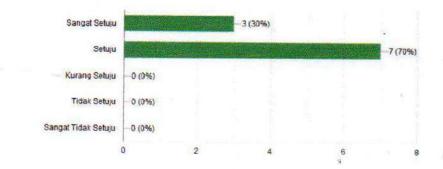
Soal-soal latihan lebih menyenangkan dalam bentuk pilihan salah/benar.

# Beberapa jenis game perlu dimasukan kedalam materi pembelajaran bahasa Inggris.



## Materi bahasa inggris di jurusan TKJ harus mendukung kebutuhan karir anda kedepan

10 tanggapan





#### KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI METRO FAKULTAS TARBIYAH DAN ILMU KEGUUAN Jalan Ki. Hajar Dewantara Kampus 15 A Iringmulyo Metro Timur Kota Metro Lampung 34111 on (0725) 41507; Faksimili (0725) 47296; Website: www.tarbiyah.metrouniv.ac.id; e-mail: tarbiyah.lain@metrouniv.ac.id

Nomor : Istimewa

: Izin Validasi

20 Agustus 2019

Hal

Yth.

## Ahmad Madzkur, M.Pd.

Dosen IAIN Metro

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

| Nama    | : Andri Prayoga  |
|---------|--|
| NPM     | : 1501070149   |
| Prodi   | : Tadris Bahasa Inggris  |
| Sponsor | : 1. Dr. Dedi Irwansyah, M.Hum. 2. Trisna Dinillah Harya, M.Pd   |
| Judul   | : Developing English Complimentary Materials for Computer Network<br>Engineering Student at Vocational High School Teladan Metro Within<br>Academic Year 2018/2019 |

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





Hal

: Izin Validasi

Yth.

Dr. Dedi Irwansyah, M.Hum.

Dosen IAIN Metro

Kami mohon dengan hormat, Bapak/Tbu bersedia menjadi validator instrumen need analysis bagi mahasiswa:

| Nama    | : Andri Prayoga  |  |
|---------|--|--|
| NPM     | : 1501070149   |  |
| Prodi   | : Tadris Bahasa Inggris  |  |
| Sponsor | : 1. Dr. Dedi Irwansyah, M.Hum. 2. Trisna Dinillah Harya, M.Pd.  |  |
| Judul   | : Developing English Complimentary Materials for Computer Network<br>Engineering Student at Vocational High School Teladan Metro Within<br>Academic Year 2018/2019 |  |
|         |  |  |

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





Yth.

Dr. Umi Yawisah, M.Hum.

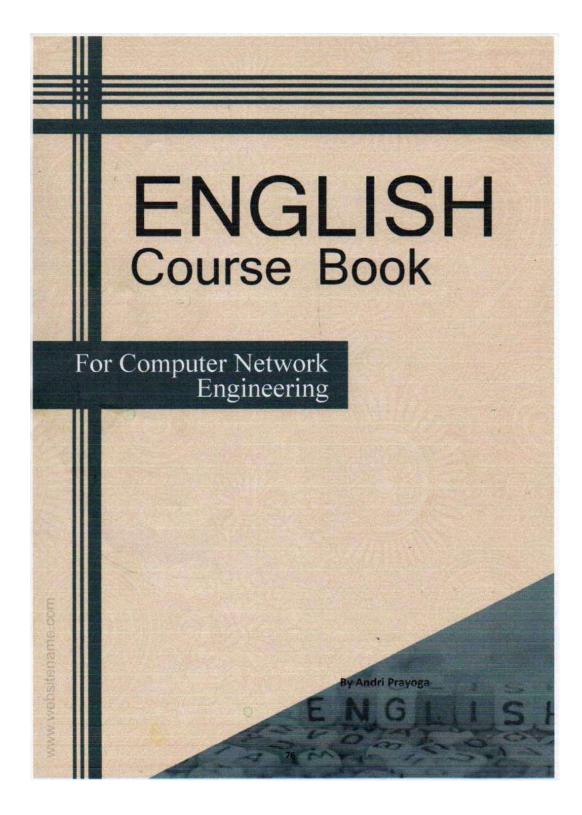
Dosen IAIN Metro

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

| Nama    | : Andri Prayoga  |
|---------|--|
| NPM     | : 1501070149   |
| Prodi   | : Tadris Bahasa Inggris  |
| Sponsor | : 1. Dr. Dedi Irwansyah, M.Hum. 2. Trisna Dinillah Harya, M.Pd.  |
| Judul   | : Developing English Complimentary Materials for Computer Network<br>Engineering Student at Vocational High School Teladan Metro Within<br>Academic Year 2018/2019 |

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Cetua Jurusan Annad Subhan Roza, M.Pd KINIP 1975061020080110114



Kata Pengantar

Segala puji bagi Allah Swt yang mengajar manusia dengan pena Nya sehingga manusia mengetahui apa yang sebelumnya belum ia ketahui. Sholawat dan salam terbaik teruntuk Nabi Muhammad SAW, inspirasi terbaik bagi muslimin.

SMK merupakan wadah pendidikan yang memiliki tujuan spesisfik pada skill tertentu yang salah satunya adalah Teknik Komputer Jaringan (computer network engineering). Di dalam ruang lingkup teknik komputer jaringan (TKJ) istilah-istilah bahasa Inggris sering kali digunakan tanpa disadari. Buku pelajaran bahasa Inggris yang disediakan oleh pemerintah masihlah memuat materi yang unum dan kurang berelasi dengan jurusan TKJ. Hal inilah yang menjadi salah satu faktor disustinya buku ini yakni untuk melengkapi kebutuhan bahasa Inggris yang sesuai dengan bidang TKJ.

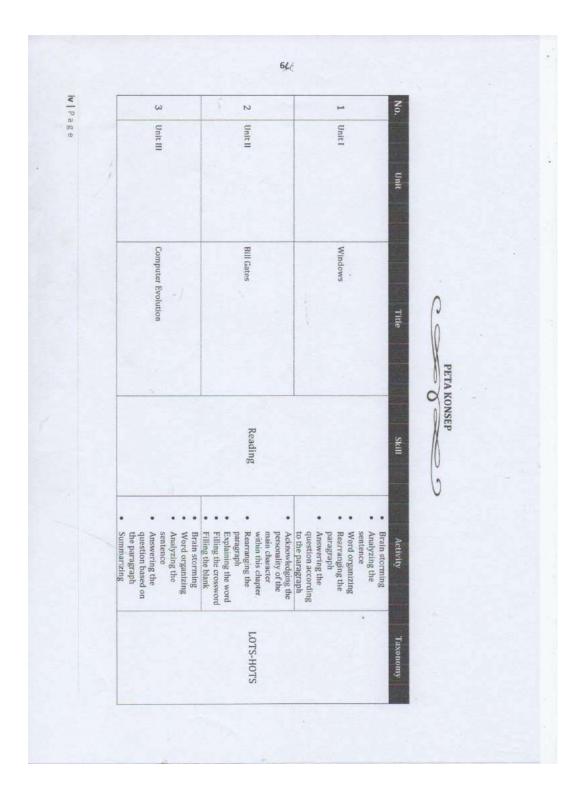
Penulis tentunya berharap buku ini dapat mengisi ruang kosong dalam pembelajaran bahasa inggris di bidang TKJ dan menjadi kemudahan bagi siswa untuk mempelajari bahasa Inggris. Banyak hal yang perlu dikoreksi dan diperbaiki pada buku ini oleh karenanya kritik dan saran dari semua pihak akan sangat membantu pengembangan buku ini.

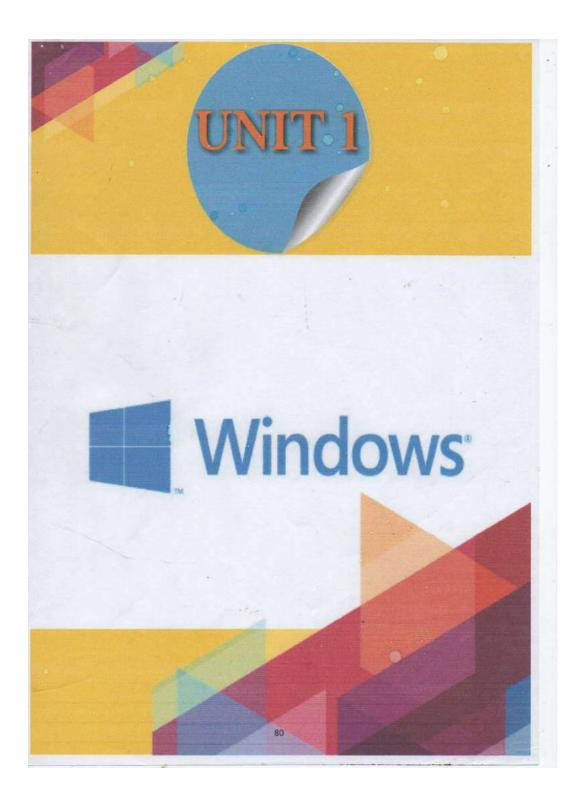
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| By the end of the  | Learning Outcomes<br>study the student will be able to:  |
|--|--|
|  |  |
| 2. learn new v   | e content within the text;<br>vocabulary related to their study program; and<br>the raged information.   |
| Vocabulary Enr   | ichment  |
| <ol> <li>Bookmark</li> <li>Clipboard</li> <li>Copy</li> <li>Default</li> <li>Font</li> <li>Format</li> <li>Format</li> <li>Item</li> <li>Pane</li> <li>Paste</li> <li>Refresh</li> </ol> | : penanda halaman (n)<br>: papan klip (n)<br>: Menyalin (v), salinan (n)<br>: standar (adj), baku (adj)<br>: jenis huruf (n)<br>: susunan (n), menyusun (v)<br>:hal (n), barang (n)<br>: panel (n)<br>: menempelkan (v)<br>: menyegarkan (v) |
| AC   | "In my experience, each<br>failure contains the<br>seeds of your next<br>success – if you are<br>willing to learn from it"<br>Paul Allen-Microsoft<br>Co-founder   |

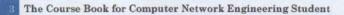
### Appendix 1

#### Activity 1. Brain Storming

Windows is the most familiar operating system (OS). Almost every computer over the world is installed with windows. The development of this OS seems never end. By today there are more or less 12 series of Windows for PC. Here are 5 common types of windows which are still utilized.



- 1. Have you ever used the whole type of windows above?
- 2. Which Windows do you love the most? Why do you love that windows?
- 3. Which windows do you rarely see?
- 4. Do you think that the previous version is still relevant to support you?



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# What is Windows?

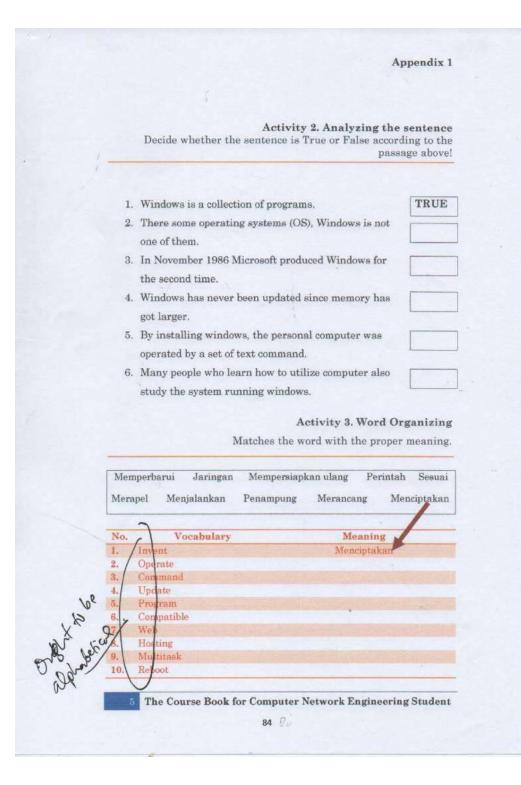
Windows is a collection of programs known as an operating system (OS) that controls a PC (personal computer). First produced by Microsoft in November 1985, it has been frequently updated since, as computer memory has got bigger, as processing chips have got faster and, of course, when the internet was invented. Prior to Windows, PCs were operated by a series of text commands.

Almost all software programs and games are compatible to Windows. The user can freely use any web design program by having windows hosting. Windows Promotes multitasking by allowing the user to do several things on the computer at once – for example, watches a video while writing a letter. However, windows must be rebooted periodically.

Other operating systems are available, notably the Apple OS X used in Mac computers. In addition, with the increased use of smartphones, notepads and tablets, there are systems aimed directly at mobile devices. However, most people who learn to use computers do so on a system running Windows.

Source: https://www.digitalunite.com/technology-guides/computer-basics/usingcomputer/what-windows

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### Appendix 1

#### Windows Origin

Before the release of Microsoft Windows, Microsoft users used single task <u>command line</u> operating system <u>MS-DOS</u>. Because Microsoft names most of its products with one word, it needed a word that best described its new GUI operating system. Microsoft chose "Windows" because of the multiple <u>windows</u> that allow different tasks and programs to be run at the same time. Because it is impossible to trademark a common name like "Windows" it is officially known as "Microsoft Windows". The first version of Microsoft Windows was version 1.0, released in <u>1985</u>.

https://www.computerhope.com/jargon/w/windows.htm

#### Activity 4. Rearranging the paragraph

There are several random sentences bellow, unite the sentences into one correct paragraph based on the paragraph above.

| * | In 1985 Microsoft launched the first version of Windows namely version 1.0.  |  |
|---|--|--|
| A | The use of single task command line was familiar before<br>the launching of Microsoft Windows  |  |
| A | Because of the capability of its new product in running<br>different tasks and programs at once within multiple<br>screen, Microsoft decide to name its operating system<br>"Windows". |  |
| A | The Microsoft tendency of using a single word to represent<br>its product made it important to select one word which<br>could describe its new GUI operating system.                   |  |
| A | It is officially trademarked as Microsoft Windows because<br>the word of windows is too general.   |  |

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### Appendix 1

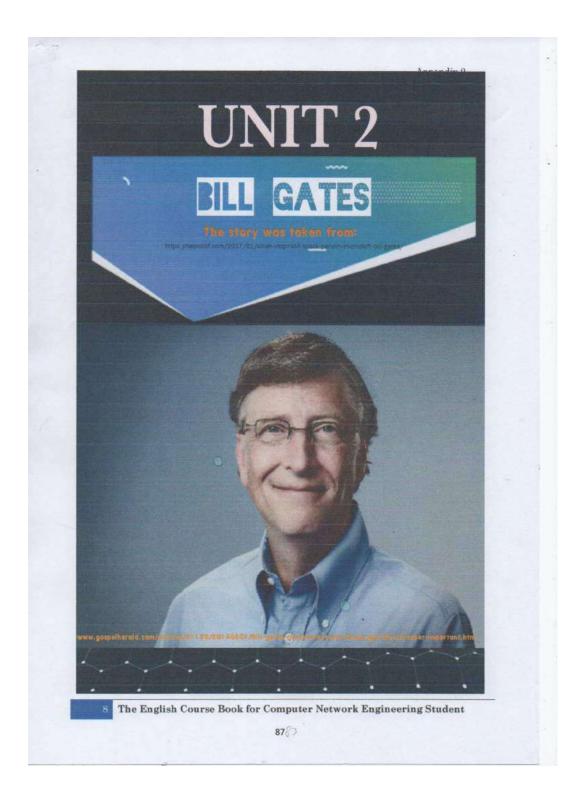
# Activity 5. Answering the question according to the paragraph above.

- 1. What is the official name of Windows?
- 2. When did the Microsoft user use the single task command line?
- 3. When did Microsoft launched Windows for the first time?
- 4. Why Microsoft needed one word to represent its product?
- 5. Why did Microsoft name its product "Windows"?

### Interesting Fact.

More than 6.000 viruses of PC are spread every month

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# Learning Outcomes

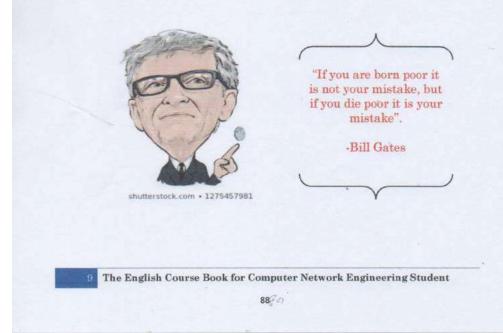
Appendix 2

By the end of the study the students will be able to:

- 1. Understand new vocabularies related to computer network engineering language.
- 2. Take the value from the inspirational story of Bill Gates.
- 3. Explain some terms used in computer network engineering.

#### **Vocabulary Enrichment**

| Adjust   | : menyesuakan (v)              |  |
|----------|--------------------------------|--|
| Buffer   | : penyangga (n), menahan (v)   |  |
| Dial     | : tombol penyetel (n)          |  |
| Input    | : memasukan (v)                |  |
| Install  | : memasang (v),                |  |
| Organize | : mengatur (v), menata (v)     |  |
| Plug in  | : menyambungkan/sambungkan (v) |  |
| Restore  | : memulihkan (v)               |  |
| Socket   | : terminal/colokan( n)         |  |
| Enable   | : membolehkan (v)              |  |



Appendix 2

# Task 1. Acknowledging the personality of the main character within this chapter.

Probably, all of you are familiar with Bill Gates. He is a prominent figure in technology revolution and the owner of the biggest software company in the world. There must be a great story behind the success of Bill Gates and his company.

- 1. What across to your mind when you heard Bill Gates?
- 2. What is the greatest invention of Bill Gates?
- 3. Mention one of Bill Gates Quotes motivating you the most!
- 4. Were you as smart and as wealthy as Bill Gates what will you do?

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# The Inspirational Story of Bill Gates

alone



William Henry Gates III or better known as Bill Gates was born in Seattle, Washington on October 28, 1955. Bill's father, Bill Gates Jr, worked at a law firm as a lawyer and his mother, Mary, was a former teacher. Bill is the second of three brothers. Bill has a hobby of hiking; even now this activity is still often done if he is thinking.

Appendix 2

Bill Gates has marvelous computer capabilities since he was still in school at the Lakeside. It starts with hacking school computers, changing schedules and student placement. Thanks to his "action" he got a penalty for not touching all computer devices in



his school for some time. However, after the sentence ended, Bill Gates, Paul Allen, and two other hackers were hired by Computer Center Corp. as company security system tester. In return, they were free to use the company computer. According to Bill, at that time they really could dig deeper the computer.

Furthermore, the ability of Bill Gates increasingly honed. Making a payment system program for Information Science Inc. was his first business. Bill and Paul Ellen founded their first company called Traf-O-Data. They created a small computer to measure the flow of traffic. Working as a debugger in the TRW defense contractor

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company and the author of the computerized school schedule gave Bill Gates more experience.

Collaboration between Bill's company and MITS established the development of an operating system with Microsoft BASIC. Before "Microsoft" registered on November 26, 1976, Bill branded his company "Micro-soft". Bill felt the Microsoft BASIC operating system was still not properly valued. Many computer users could easily use, tamper, and reproduce all operating systems without any benefits given to Microsoft. In 1976 Microsoft ended the contract with MITS because of differences in views. After breaking the contract, one of the major



computer hardware companies, IBM, offered Microsoft cooperation in developing IBM's newest computer operating system, the IBM PC.

Bill and Microsoft began to develop the operating system to create an MS-DOS system. IBM bought the Microsoft work with a dowry of

\$ 50,000. MS-DOS was continually developed and looked at by many parties. The result, the dollars began to flow to Microsoft. Microsoft was increasingly victorious with the birth of Microsoft Windows in 1985 until now the development is still being carried out and we can enjoy the latest version of Windows 10. Microsoft has truly become part of computing needs throughout the world. Almost everyone recognizes Bill Gates one of the richest men. Through Bill & Melinda Gates Foundation, he has donated countless of his personal money in many fields and in many countries.

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Task 2. Rearrange the sentence into a correct paragraph based on the text above.

 a. William Henry Gates was born in Seattle, Washington on October 28, 1955.

**b.** He was temporarily forbidden to touch the whole computer devices within the school.

c. He developed an operating system called Ms-Dos bought by IBM.

 ${\bf d}.\;$  Bill loves hiking especially when he looks for idea

e. Bill became bug hunter in computer center corp. as the consequence he was allowed to use the company computer.

f. He has amazing skill in computer since he was senior high school. It was proven when he and his three friends hacked the school computer to rearrange the schedule and student placement.

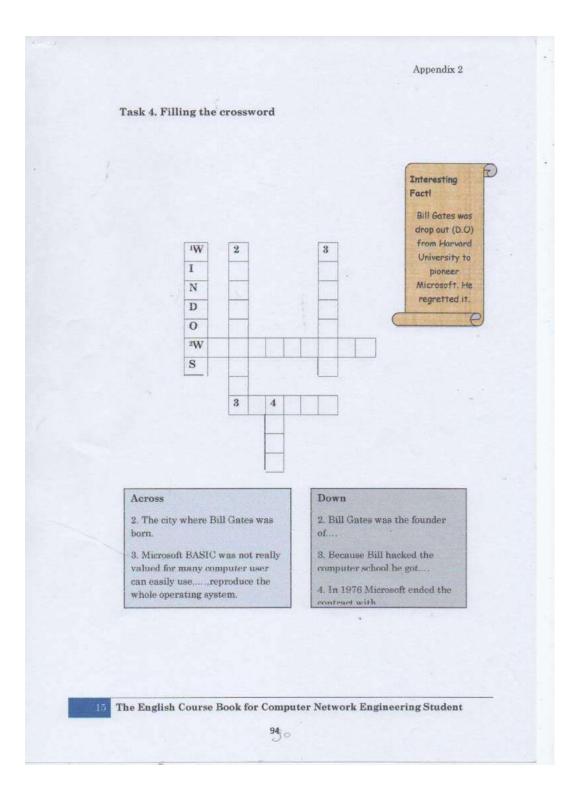
g. He created a system program for Information Science Inc.

h. In 1985 Microsoft successfully invented Windows system.

 Bill and Paul established Micro-Soft which was registered as Microsoft.

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| 1    | Task 3. Explain the word/phrase bellow by using your own |
|------|--|
| 1    | understanding!   |
| / 1  | 1. Hack  |
| 6.20 |  |
|      |  |
|      | 2. Hardware  |
|      |  |
|      |  |
|      |  |
| 1    | 3. Debugger  |
|      |  |
|      |  |
| 4    | 4. BASIC   |
|      | *  |
|      |  |
| 1    | 5. Windows   |
|      |  |
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# Task 5. Filling the blank (Work in Pair)

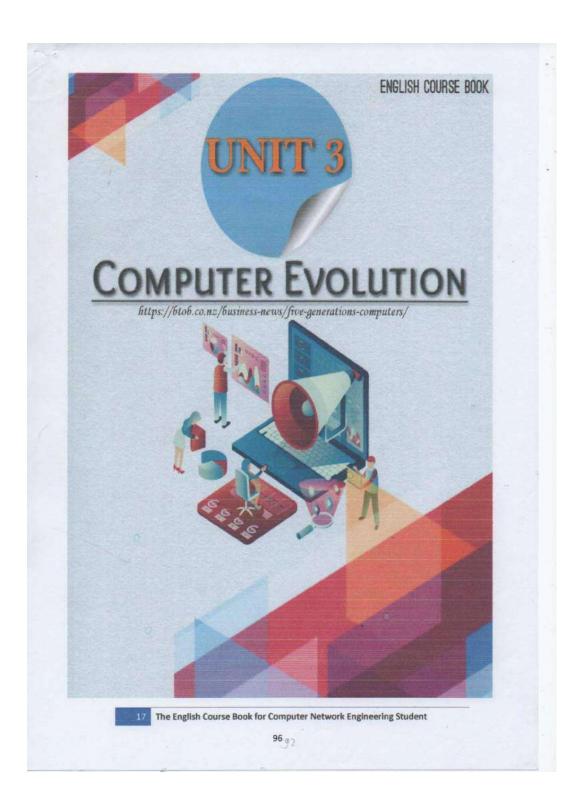
There are 5 blanks in the following passage. Choose the most suitable words in the box to fill each blank.

| Admits  | Contribute | Glorious |
|---------|------------|----------|
| Started | Undertaken |          |

Bill and Microsoft 1.\_\_\_\_\_ to develop the operating system to create an MS-DOS system. IBM bought the Microsoft work with a dowry of \$ 50,000. MS-DOS was continually developed and looked at by many parties. The result, the dollars began to flow to Microsoft. Microsoft was increasingly 2. \_\_\_\_\_with the birth of Microsoft Windows in 1985 until now the development is still being 3. \_\_\_\_and we can enjoy the latest version of Windows 10. Microsoft has truly become part of computing needs throughout the world. Almost everyone 4. \_\_\_\_Bill Gates one of the richest men. Through Bill & Melinda Gates Foundation, he has 5. \_\_\_\_countless of his personal money in many fields and in many countries.

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# **Learning Outcomes**

After completing every learning stage within this course book properly, the apprentices will have the capability to;

- understand new vocabularies related to computer network engineering language;
- 2. enrich their insight about computer history; and
- 3. explain some particular terms of computer network engineering.

# **Vocabulary Enrichment**

| 1. Access      | : akses (n), mengakses (v)   |
|----------------|--|
| 2. Artificial  | : buatan (adj), tiruan (adj)   |
| 3. Bit         | : kecil (adj), bagian kecil (n)  |
| 4. Boot        | : mempersiapkan (v)  |
| 5. Browse      | : mencari (v), melihat-lihat(v),   |
| 6. Cache       | : menyembunyikan (v)   |
| 7. Driver      | : kemudi (n), pengemudi (n) mengemudikan (v)   |
| 8. Floppy      | : lentur (adj)   |
| 9. Peripheral  | : tambahan (adj),  |
| 10. Transistor | : saklar penyambung (n)  |
|                | "Computers are incredibly  |
| (A)            | "Computers are incredibly<br>fast, accurate and stupid;<br>humans are incredibly slow,<br>inaccurate and brilliant;<br>together they are powerful<br>beyond imagination."<br>Albert Einstein |
| (A)            | fast, accurate and stupid;<br>humans are incredibly slow,<br>inaccurate and brilliant;<br>together they are powerful<br>beyond imagination."   |

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#### Task 1. Brainstorming

#### How Much You Know About Computer History?

- Have you ever heard ENIAC? If you have not heard about ENIAC, turn your mobile phone on then browse some information in any websites according to your language.
- 2. Based on your opinion, what is the most interesting fact of ENIAC?
- 3. What is ENIAC stand for?

### **First Generation - Vacuum Tubes**



These early computers used vacuum tubes as circuitry and magnetic drums for memory. As a result they were enormous, literally taking up entire rooms and costing a fortune to

run. These were inefficient materials which generated a lot of heat, sucked huge electricity and subsequently generated a lot of heat which caused ongoing breakdowns. These first generation computers relied on 'machine language' (which is the most basic programming language that can be understood by computers). The two notable machines of this era were the UNIVAC and ENIAC machines.



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| Put the correct listed wo | Task. 2 Word<br>rd in the first column into the sec | Organiz |
|---------------------------|---|---------|
| 1. Vacuum Tube            | a. Besar  |         |
| 2. Enormous               | a. besar<br>b. Listrik                              | ()      |
| 3. Circuitry              | c. Menghasilkan                                     | ()      |
| 4. Generate               | d. Penting  | ()      |
| 5. Heat                   | e. Sirkuit  | ()      |
| 6. Suck                   | f. Panas  | ()      |
| 7. Electricity            | g.Tabung Vakum                                      | ()      |
| 8. Notable                | h. Menghisap  | ()      |
| 9. Breakdowns             | i. Pemrograman                                      | ()      |
| 10. Programming           | i. Kerusakan  | ()      |

Task 3. Organizing Word You have to choose five proper vocabularies from Task 2 to fulfill the incomplete sentences.

- The first computer utilized magnetic drums for memory and vacuum tube as\_\_\_\_.
- 2. UNIVAC and ENIAC were the two\_\_\_\_machine of the first computer generation era.
- 3. The gize of the first computers were\_\_\_\_. To operate, it needs a big space and much money.
- The materials used in the first computer generations were unsuitable and \_\_\_\_\_a lot of heat that induced ongoing \_\_\_\_\_.

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#### Second Generation - Transistors



The replacement of vacuum tubes by transistors saw the advent of the second generation of computing. Although first invented in 1947, transistors weren't used significantly in computers

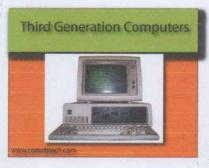
until the end of the 1950s. They were a big improvement over the vacuum tube, despite still subjecting computers to damaging levels of heat. However they were hugely superior to the vacuum tubes, making computers smaller, faster, cheaper and less heavy on electricity use. They still relied on punched card for input/printouts.



| <ol> <li>Answer:</li> <li>The application of transistor makes the second compute generation better than the first generation.</li> </ol> | The second computer generation is recognized by the use of |
|--|--|
|  | transistor.<br>Answer:                                     |
|  |  |
| Answer:  | Answer:  |

| Appendix 3  |
|---|
| 3. Transistor was significantly used before 1950s.<br>Answer:   |
| <br><ol> <li>The second computer generation is smaller, faster, cheaper and<br/>required more electricity.<br/>Answer:</li> </ol> |
| 5. The second generation of computer had problem with heat.<br>Answer:  |
|   |
|   |
|   |
|   |
| Magnetic drum was used as memory<br>in the early computer generation  |
|   |
|   |
| 22 The English Course Book for Computer Network Engineering Student   |
| 101 37  |

#### **Third Generation - Integrated Circuits**



By this phase, transistors were now being miniaturized and put on silicon chips (called semiconductors). This led to a massive increase in speed and efficiency of these machines. These were the first computers where users

interacted using keyboards and monitors which interfaced with an operating system, a significant leap up from the punch cards and printouts. This enabled these machines to run several applications at

once using a central program which functioned to monitor memory. As a result of these advances which again made machines cheaper and smaller, a new mass market of users emerged during the '60s



# Task 5. Answering the Questions

- 1. What is another name of silicon chips?
- 2. What is the benefit of using semiconductors?
- 3. What are the additional devices included in this third computer generation?
- 4. Why the machine can run several applications at once?
- 5. Explain in a short sentence about punch card and printout!

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# Fourth Generation - Microprocessors

This revolution can be summed in one word: Intel. The chip-



maker developed the Intel 4004 chip in 1971, which positioned all computer components (CPU, memory, input/output controls) onto a single chip. The increased power of these small computers meant they could be linked, creating networks. Which ultimately led to the development, birth and rapid

evolution of the Internet. Other major advances during this period

have been the Graphical user interface (GUI), the mouse and more recently the astounding advances in lap-top capability and hand-held devices.



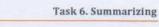
#### The Fifth Generation-AI



Computer devices with artificial intelligence are still in development, but some of these technologies are beginning to emerge and be used such as voice recognition. AI is a reality made possible by using parallel processing and superconductors. Leaning to the future, computers will be radically transformed

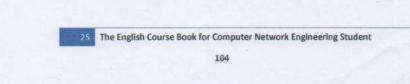
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again by quantum computation, molecular and nano-technology. The essence of fifth generation will be using these technologies to ultimately create machines which can process and respond to natural language, and have capability to learn and organize themselves.



Make a group consisting/at least 3 members, based on the text of computer generation please make a summary from the fourth and fifth computer generation!

Ø,



Daftar Pustaka N 5 SEPOSITIF. "Kisah Inspiratif Sosok Pendiri Microsoft - Bill Gates." SEPOSITIF (blog), January 6, 2017. https://sepositif.com/2017/01/kisah-inspiratifsosok-pendiri-microsoft-bill-gates/. "The Five Generations of Computers." Business to Business (blog), November 15, 2016. https://btob.co.nz/business-news/five-generations-computers/. "What Is Windows?" Accessed 23, 2019. August https://www.computerhope.com/jargon/w/windows.htm. "What Is Windows? | Digital Unite." Accessed August 23, 2019. https://www.digitalunite.com/technology-guides/computer-basics/usingcomputer/what-windows. layout Adaphy me 7 00 nonin teer 1 105

| Yang bertanda tangan di bawah ini:<br>Nama : Delli Irwansyah<br>Jabatan/Pekerjaan : Dosen<br>Instansi Asal : IA IN Metro |      |
|--|------|
| Nama Deli Irwansyah<br>Jabatan/Pekerjaan Dosen<br>Instansi Asal IA IN Metro  |      |
| Instansi Asal : 1AIN Metro   |      |
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| Menyatakan bahwa instrumen need analysis dengan judul:   |      |
| Developing English Complimentary Materials or Computer Netwo   | ork  |
| Engineering Student at Vocational High School Teladan o Metro with   | hîn  |
| Academic Year 2018/2019  |      |
| dari mahasiswa:  |      |
| Nama : Andri Prayoga   |      |
| Program Study : Tadris Bahasa Inggris  |      |
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# VALIDATION SHEET

# Petunjuk Pengisian :

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# Keterangan:

| 1 | : Sangat Buruk | 3 | : Cukup Baik | 5 | : Sangat Baik |
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| 1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7. | Kesesuaian judul<br>Kesesuaian ukuran<br>Bahasa dan vocabulary<br>Kesesuaian materi<br>Kedalaman materi |       |      | v<br>v | v |
|--|---|-------|------|--------|---|
| 3.<br>4.<br>5.<br>6.                   | Bahasa dan vocabulary<br>Kesesuaian materi  |       |      | v      | V |
| 4.<br>5.<br>6.                         | Kesesuaian materi   |       |      | v      |   |
| 5.<br>6.                               |   |       | -    |        |   |
| 6.                                     | Kedalaman materi  |       |      | V      |   |
|  |   |       | -    | V      |   |
| 7.                                     | Keakuratan materi   |       |      | v      |   |
|  | Kemutakhiran materi   |       |      | - 20   | 1 |
| 8.                                     | Kesesuaian dengan tingkat perkembangan siswa  |       | V    |        |   |
| 9.                                     | Komunikatif   |       | V    |        |   |
| 10.                                    | Akurasi   |       |      | V      |   |
| 11.                                    | Keruntutan dan kesatuan gagasan   |       |      | V      |   |
| 12.                                    | Tekhnik penyajian   |       |      |        | V |
| 13.                                    | Penyajian pembelajaran  |       |      | v      |   |
| 14.                                    | Tata Letak Isi  |       |      |        | 1 |
| 15                                     | Ilustrasi isi   |       |      | -      | 1 |
| 16.                                    | Tipografi Materi  |       |      | V      |   |
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|-----------------------------|--|
|                             | RAT KETERANGAN VALIDASI  |
| Yang bertanda tangan di ba  | awah ini:  |
| . Nama                      | Dr. UMI VAWISAH, M. HUM.   |
| Jabatan/Pekerjaan           | Duren  |
| Instansi Asal               | . IAIN Metro   |
| Menyatakan bahwa instrum    | nen need analysis dengan judul:  |
| Developing English          | Complimentary Materials or Computer Network  |
| Engineering Student         | t at Vocational High School Teladan o Metro within   |
| Academic Year 2018/         | /2019  |
| dari mahasiswa:             |  |
| Nama                        | : Andri Prayoga  |
| Program Study               | : Tadris Bahasa Inggris  |
| NPM                         | : 1501070149   |
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# VALIDATION SHEET

# Petunjuk Pengisian :

: Buruk

Berikut ini adalah butir -butir poin yang berkaitan dengan materi bahasa Inggris yang telah dikembangkan. Bapak/Ibu dipersilahkan untuk memberikan tanda centang ( $\sqrt{}$ ) pada salah satu kolom 1, 2, 3, atau 4 pada setiap poin yang adapada tabel. Mohon ditulis saran perbaikan pada ruang yang disediakan.

# Keterangan:

2

#### : Sangat Buruk 3 : Cukup Baik 1 5 : Sangat Baik : Baik

| 1.  | Poin  | 1    | 2 | 3 | 4, |
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| -   | Kesesuaian judul  | -    | 1 |   | V  |
| 2.  | Kesesuaian ukuran   | -    |   | 1 | V  |
| 3.  | Bahasa dan vocabulary                                       |      |   | V |    |
| 4.  | Kesesuaian materi   |      |   | V |    |
| 5.  | Kedalaman materi  |      |   | V |    |
| 6.  | Keakuratan materi   |      | - | V |    |
| 7.  | Kemutakhiran materi   |      |   |   | V  |
| 8.  | Kesesuaian dengan tingkat perkembangan siswa                |      |   | V |    |
| 9.  | Komunikatif   |      |   | V |    |
| 10. | Akurasi   |      |   | 1 |    |
| 11. | Keruntutan dan kesatuan gagasan                             |      |   | V |    |
| 12. | Tekhnik penyajian   | -    |   | V |    |
| 13. | Penyajian pembelajaran                                      |      |   | V |    |
| 14. | Tata Letak Isi  |      |   |   | V  |
| 15  | Ilustrasi isi   |      |   |   | 1  |
| 16. | Tipografi Materi  |      |   |   | 1  |
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|---------------------------|--|
| SU                        | RAT KETERANGAN VALIDASI  |
| Yang bertanda tangan di b | awah ini:  |
| Nama                      | Ahmad Madkur   |
| Jabatan/Pekerjaan         | Josen Prof. TB1  |
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| Menyatakan bahwa instru   | nen need analysis dengan judul:  |
| Developing Englis         | h Complimentary Materials or Computer Network  |
| Engineering Studen        | at Vocational High School Teladan o Metro within   |
| Academic Year 2018        | 3/2019   |
| dari mahasiswa:           |  |
| Nama                      | : Andri Prayoga  |
| Program Study             | : Tadris Bahasa Inggris  |
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# VALIDATION SHEET

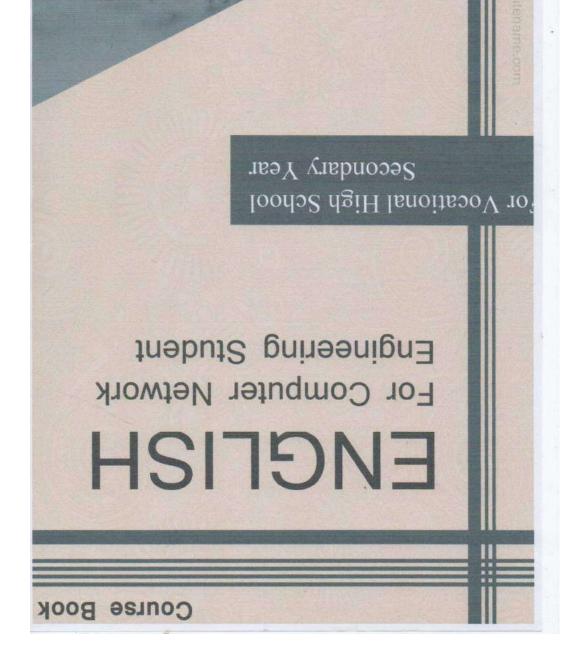
# Petunjuk Pengisian :

Berikut ini adalah butir --butir poin yang berkaitan dengan materi bahasa Inggris yang telah dikembangkan. Bapak/Ibu dipersilahkan untuk memberikan tanda centang ( $\sqrt{}$ ) pada salah satu kolom 1, 2, 3, atau 4 pada setiap poin yang adapada tabel. Mohon ditulis saran perbaikan pada ruang yang disediakan.

# Keterangan:

| 1 | : Sangat Buruk | 3 | : Cukup Baik | 5 | : Sangat Baik |
|---|----------------|---|--------------|---|---------------|
| 2 | · Buruk        | 4 | Baik         |   |               |

| 1.                  | Poin  | 1 | 2 | 3  | 4 | 5 |
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|                     | Kesesuaian judul  |   |   | -  |   |   |
| 2.                  | Kesesuaian ukuran   |   |   |    | ~ |   |
| 3.                  | Bahasa dan vocabulary   |   |   |    | ~ |   |
| 4.                  | Kesesuaian materi   |   |   | V  |   |   |
| 5.                  | Kedalaman materi  |   |   |    | V |   |
| 6.                  | Keakuratan materi   |   |   | -  | ~ |   |
| 7.                  | Kemutakhiran materi   |   |   |    | ~ | - |
| 8.                  | Kesesuaian dengan tingkat perkembangan siswa  |   |   | V  |   |   |
| 9.                  | Komunikatif   |   |   | 1  | 1 |   |
| 10.                 | Akurasi   |   |   | V  |   |   |
| 11.                 | Keruntutan dan kesatuan gagasan   |   |   | 1  |   |   |
| 12.                 | Tekhnik penyajian   |   |   |    | 1 |   |
| 13.                 | Penyajian pembelajaran  |   |   | 1. | ~ |   |
| 14.                 | Tata Letak Isi  |   |   | V  |   |   |
| 15                  | Ilustrasi isi   |   | V |    |   |   |
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Segala puji bagi Allah Swt yang mengajar manusia dengan pena Nya sehingga manusia mengetahui apa yang sebelumnya belum ia ketahui. Sholawat dan salam terbaik teruntuk Nabi Muhammad SAW, inspirasi terbaik bagi muslimin.

SMK merupakan wadah pendidikan yang memiliki tujuan spesisfik pada skill tertentu yang salah satunya adalah Teknik Komputer Jaringan (computer network engineering). Di dalam ruang lingkup Teknik Komputer Jaringan (TKJ) istilah-istilah bahasa Inggris sering kali digunakan tanpa disadari. Buku pelajaran bahasa inggris yang disediakan oleh pemerintah masihlah memuat materi yang umum dan kurang berelasi dengan jurusan TKJ. Hal inilah yang menjadi salah satu faktor disusunya buku ini yakni untuk melengkapi kebutuhan bahasa Inggris yang sesuai dengan bidang TKJ.

Penulis tentunya berharap buku ini dapat mengisi ruang kosong dalam pembelajaran bahasa inggris di bidang TKJ dan menjadi kemudahan bagi siswa untuk mempelajari bahasa Inggris. Banyak hal yang perlu dikoreksi dan diperbaiki pada buku ini oleh karenanya kritik dan saran dari semua pihak akan sangat membantu pengembangan buku ini.

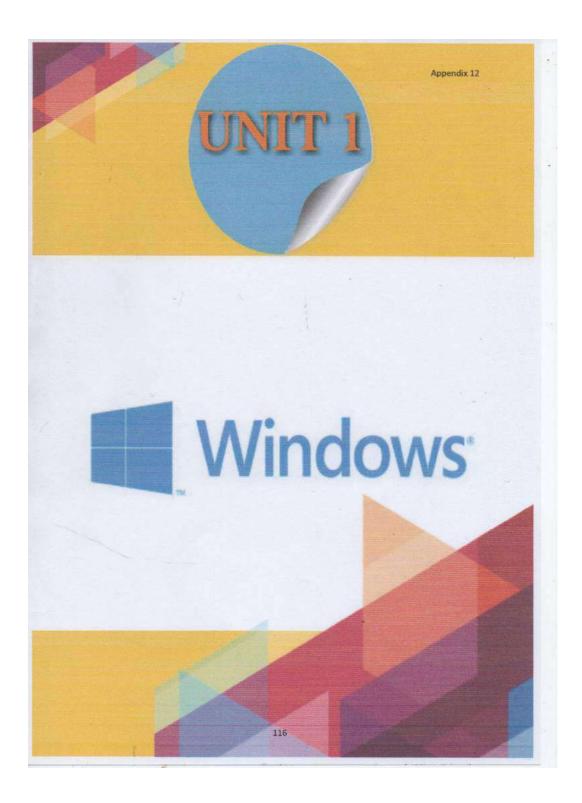
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II | Page

|   |                | Appendix 12 |  |
|---|----------------|-------------|--|
|   |                |             |  |
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|   | Kata Pengantar | ii          |  |
|   | Daftar Isi     |             |  |
|   | Peta Konsep    | iv          |  |
|   | Unit 1         |             |  |
|   | Windows        | 1           |  |
|   | Unit 2         |             |  |
|   | Bill Gates     | 8           |  |
|   | Unit 3         |             |  |
|   | The Anonymous  | 17          |  |
|   |                |             |  |
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| No. | Unit     | Title             | Skill   | Activity   | Taxonomy  |
|-----|----------|-------------------|---------|--|-----------|
| 1   | Unit I   | Windows           |         | <ul> <li>Brain storming</li> <li>Analyzing the<br/>sentence</li> <li>Word organizing</li> <li>Rearranging the<br/>paragraph</li> <li>Answering the<br/>question according<br/>to the paragraph</li> </ul>              |           |
| 2   | Unitli   | - J<br>Bill Gates | Reading | <ul> <li>Acknowledging the personality of the main character within this chapter.</li> <li>Rearranging the paragraph</li> <li>Explaining the word</li> <li>Filling the crossword</li> <li>Filling the blank</li> </ul> | LOTS-HOTS |
| 3   | Unit III | Anonymous         |         | <ul> <li>Brain storming</li> <li>Word organizing</li> <li>Analyzing the<br/>sentence</li> <li>Answering the<br/>question based on<br/>the paragraph</li> <li>Summarizing</li> </ul>                                    | -         |
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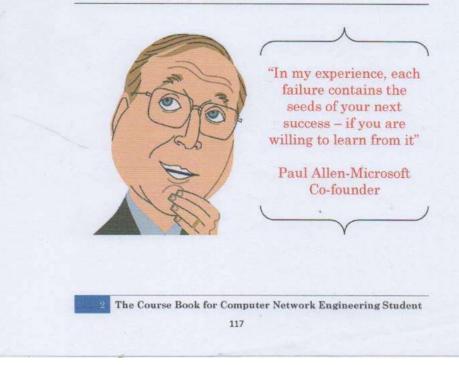
# Learning Outcomes

By the end of the study the student will be able to:

- 1. analyze the content within the text;
- 2. learn new vocabulary related to their study program; and
- 3. Systemize the raged information.

# **Vocabulary Enrichment**

| 1 | . Bookmark  | : penanda halaman (n)       |
|---|-------------|-----------------------------|
| 2 | . Clipboard | : papan klip (n)            |
| 3 | . Copy      | : Menyalin (v), salinan (n) |
| 4 | . Default   | : standar (adj), baku (adj) |
| 5 | . Font      | : jenis huruf (n)           |
| 6 | . Format    | : susunan (n), menyusun (v) |
| 7 | . Item      | :hal (n), barang (n)        |
| 8 | . Pane      | : panel (n)                 |
| 9 | . Paste     | : menempelkan (v)           |
| 1 | 0. Refresh  | : menyegarkan (v)           |



# Activity 1. Brain Storming

Windows is the most familiar operating system (OS). Almost every computer over the world is installed with windows. The development of this OS seems never end. By today there are more or less 12 series of Windows for PC. Here are 5 common types of windows which are still utilized.



- 1. Have you ever used the whole type of windows above?
- 2. Which Windows do you love the most? Why do you love that windows?
- 3. Which windows do you rarely see?
- 4. Do you think that the previous version is still relevant to support you?

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# What is Windows?

Before Windows was invented, to operate personal computer (PC) required a series of text commands. Windows is best understood as personal PC controller or simply it is one of operating systems (OS) consisting of several programs. Microsoft launched the first windows in November 1985. Microsoft innovated its product to respond the advancement of memory and processor and the invention of internet.

-Windows is compatible to most of games and software. By owning windows hosting, the user autonomously to utilize several program of web design. Windows also enables its users to operate multitask; it means some programs can be run in the same time. To keep its performance the user must reboot the windows regularly.

Another popular operating system commonly used is Apple OS X in Mac computers. It is not only designed for computers but also for smartphones and other gadgets. Nevertheless, almost all computer users are familiar with windows.

 $({\bf Source: https://www.digitalunite.com/technology-guides/computer-basics/using-computer/what-windows)}$ 

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Appendix 12 Activity 2. Analyzing the sentence Decide whether the sentence is True or False according to the passage above! 1. Windows is a collection of programs. TRUE 2. There some operating systems (OS), Windows is not one of them. 3. In November 1986 Microsoft produced Windows for the second time. 4. Windows has never been updated since memory has got larger. 5. By installing windows, the personal computer was operated by a set of text command. 6. Many people who learn how to utilize computer also study the system running windows. Activity 3. Word Organizing

Matches the word with the proper meaning.

| Mer | apel Menjalankan | Penampung Merancang Menciptaka       |
|-----|------------------|--------------------------------------|
| No. | Vocabulary       | Meaning                              |
| 1.  | Command          |                                      |
| 2.  | Compatible       |                                      |
| 3.  | Hosting          |                                      |
| 4.  | Invent           | Menciptakan                          |
| 5.  | Multitask        |                                      |
| 6.  | Operate          | A REAL PROPERTY AND A REAL PROPERTY. |
| 7.  | Program          |                                      |
| 8.  | Reboot           |                                      |
| 9.  | Update           |                                      |
| 10. | Web              |                                      |

# Windows Origin

The users of Microsoft tend to use a single task command line operating system before Microsoft Windows was launched. Microsoft had a habit to use one word to name its product, so that's why to describe its new GUI system needed one best representative word. By considering its capability to open several layers to process different tasks at once, Microsoft named its product "Windows". Microsoft Windows is the official name of windows since it is uncommon to trademark a name like "windows". In 1985 Microsoft released the first version of windows.

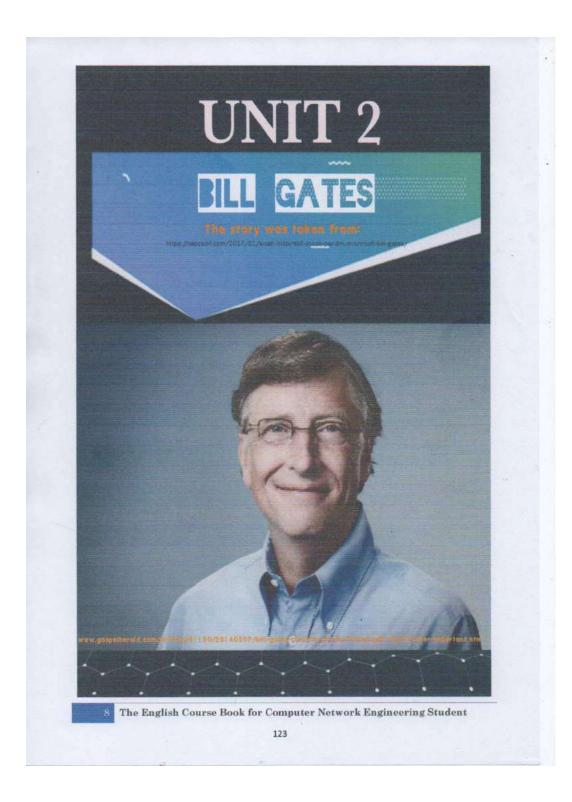
(Source: https://www.computerhope.com/jargon/w/windows.htm)

#### Activity 4. Rearranging the paragraph

There are several random sentences bellow, unite the sentences into one correct paragraph based on the paragraph above.

| A | In 1985 Microsoft launched the first version of Windows namely version 1.0.  |  |
|---|--|--|
| X | The use of single task command line was familiar before the launching of Microsoft Windows                               |  |
| X | "Windows" represents the capability of its new product in<br>running different programs at once within multiple screens. |  |
| * | Microsoft needs to select one word which could describe its new GUI operating system.                                    |  |
| * | It is officially trademarked as Microsoft Windows because<br>the word of windows is too general.                         |  |

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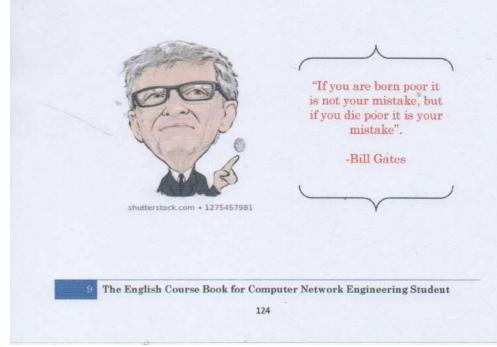
# Learning Outcomes

By the end of the study the students will be able to:

- Understand new vocabularies related to computer network engineering language.
- 2. Take the value from the inspirational story of Bill Gates.
- 3. Explain some terms used in computer network engineering.

# **Vocabulary Enrichment**

| Adjust   | : menyesuakan (v)              |  |
|----------|--------------------------------|--|
| Buffer   | : penyangga (n), menahan (v)   |  |
| Dial     | : tombol penyetel (n)          |  |
| Input    | : memasukan (v)                |  |
| Install  | : memasang (v),                |  |
| Organize | : mengatur (v), menata (v)     |  |
| Plug in  | : menyambungkan/sambungkan (v) |  |
| Restore  | : memulihkan (v)               |  |
| Socket   | : terminal/colokan( n)         |  |
| Enable   | : membolehkan (v)              |  |



# Activity 1. Acknowledging the personality of the main character within this chapter.

Probably, all of you are familiar with Bill Gates. He is a prominent figure in technology revolution and the owner of the biggest software company in the world. There must be a great story behind the success of Bill Gates and his company.

- 1. What across to your mind when you heard Bill Gates?
- 2. What is the greatest invention of Bill Gates?
- 3. Mention one of Bill Gates Quotes motivating you the most!
- 4. Were you as smart and as wealthy as Bill Gates what will you do?

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# **Bill Gates Childhood**



Bill Gates was born in Seattle, Washington on October 28, 1955. Bill is the second of three brothers. Bill gates loves hiking especially when he needs an idea. Bill gates has a great talent in computer. It's proven when Bill gates, Paul Allen and his two other friends successfully hacked the lake side school computer to change the student

placement and schedules. As the result he and his friends were temporarily forbidden to touch all computer devices within the Lakeside school. While the penalty was over, Computer Center Corp. hired them as the security system tester. Based on Bill at this moment he really learn many things about computer since he were allowed to use the company computer.

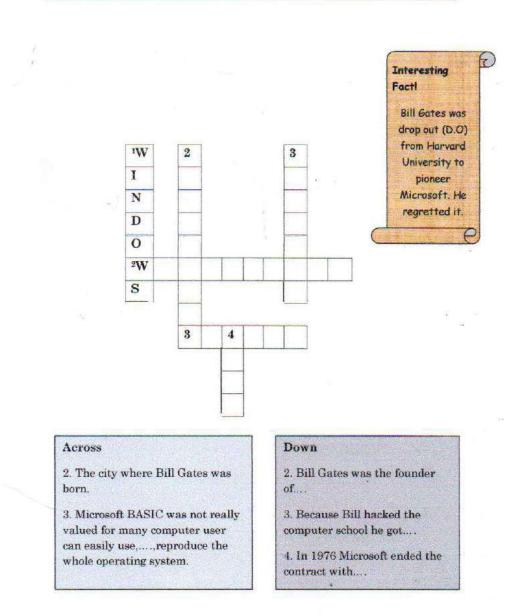
# Activity 2. Rearranging the sentence

Put the sentence below into a correct paragraph based on the text above.

| x | Bill Gates was born in Seattle, Washington on October 28, 1955.                       | 1 |
|---|---|---|
| * | The Computer Center Corp. hired Bill as the tester of security system.                |   |
| A | The goal of hacking computer school was to change the student placement and schedule. |   |
| A | As a security system tester Bill was able to dig deeper about computer.               |   |
| * | Bill and his friends were restricted to touch the whole computer devices.             |   |
| > | Bill Gates computer skill is proven when he hacked the school computer.               |   |

|   | Activity 3.Answering the question<br>Answer the following questions according to the text above |
|---|---|
| 1 | 1. What is Bill Gates Hobby?<br>Answer:   |
|   |   |
|   | 2. What is Bill's punishment for hacking the school computer?                                   |
|   | Answer:   |
|   | 3. When Bill Gates was born?  |
|   | Answer:   |
|   | 4. Who hired Bill gates after the sentence was ended?   |
|   | Answer:   |
|   | 5. Why Bill Gates hacked the Lakeside school computer?  |
|   | Answer:   |
|   |   |
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Activity 6. Explain the word bellow by using your own understanding!

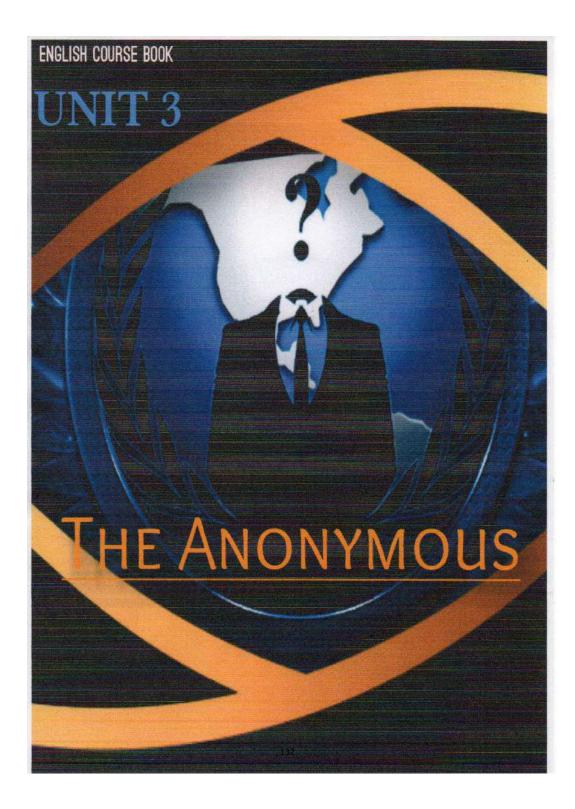
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| www.lifewire.com | Hardware |

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| Your Answer:   |             |



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# Activity1. Brainstorming

There are so many Internet users over the world. Some of them have a capability more than the ordinary netizens. They can easily break into the internet system and do whatever they want whether it is for the goodness or badness. Their identities are difficult to track yet they exist.



- 1. Who is in the picture above?
- 2. What across to your mind when you see the man in the picture?
  - a. He is dangerous.
  - b. He is such a cool guy.
- 3. Does the world need him? Why?
- 4. Do you want to be like him? Why?

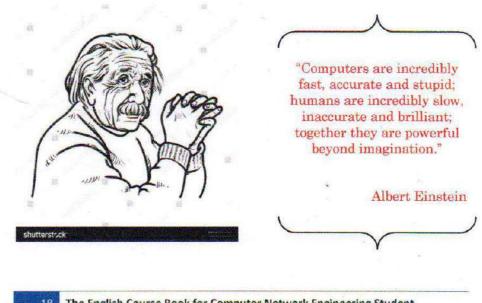
## **Learning Outcomes**

After completing every learning stage within this course book properly, the apprentices will have the capability to;

- 1. understand new vocabularies related to computer network engineering language;
- 2. enrich their insight about cybercrime; and
- 3. explain some particular terms of computer network engineering.

### **Vocabulary Enrichment**

| <br>1. | Access     | : akses (n), mengakses (v)                   |    |
|--------|------------|--|----|
| 2.     | Artificial | : buatan (adj), tiruan (adj)                 |    |
| 3.     | Bit        | : kecil (adj), bagian kecil (n)              |    |
| 4.     | Boot       | : mempersiapkan (v)                          |    |
| 5.     | Browse     | : mencari (v), melihat-lihat(v),             |    |
| 6.     | Cache      | : menyembunyikan (v)                         |    |
| 7.     | Driver     | : kemudi (n), pengemudi (n) mengemudikan (v) | 14 |
| 8.     | Floppy     | : lentur (adj)                               |    |
| 9.     | Peripheral | : tambahan (adj),                            |    |
| 10     | Transistor | : saklar penyambung (n)                      |    |
|        |            |  |    |



# **The Cyber Crime**



A crime is an activity of breaking the government law while cyber is a term which represents the whole technology environment especially the internet. Therefore, the area of cyber security is not only about securing the IT industry. In this era, with the fast development of technology, cyber crime has a significant rise. Without the right step. the

investigation becomes more complicated to deal with. The scopes of cyber criminals' targets are getting wider; not only the private and public organization but also the individual PC users may become the victim. The lack of cyber security is the basic factor why the cyber crime is rising. All types of cyber crimes happen when there is an **insecure** computer and the low skill of the PC user. So that's why every person who uses computer should learn how to defend his/her computer to **minimize** the rise of cyber crime. In current, many countries builds and implements rigorous protocol within the cyber security to avoid the lost of important data and information.

(Source: Er Navneet Kaur, "Introduction Of Cyber Crime And Its Type," International Research Journal Of Computer Science 5, No. 08 (2018): 5.)

#### Activity 2. Word organizing

Put the bold red vocabularies into the right column with the right synonym! After that, you have to write the correct translation of each vocabulary.

| Vocabulary | Synonym     | Meaning                |
|------------|-------------|------------------------|
|            | Defense     |                        |
|            | Reduce      |                        |
|            | Unprotected | •                      |
| m          | Villainy    |                        |
|            | Virtual     | A second second second |

#### Activity 3. Filling the blank

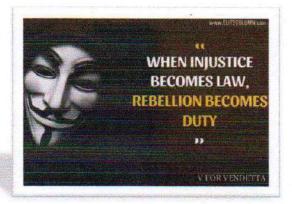
Based on the activity 2 put the correct synonym into the blank part of the sentences below!

- 1. That's why the scope of cyber\_\_\_\_\_is not only protecting the IT industry.
- 2. The action of disobeying the government law is a\_\_\_\_\_
- 3. The cyber crime can possibly occur when the computer is
- 4. The whole technology environment particularly the internet is called
- 5. To \_the rise of cyber crime everyone has to learn how to secure the computer.

### Activity 4. Answering the question Answer the questions below according to the text!

- 1. What happen when the investigation takes the wrong step?
- 2. What is cyber crime?
- 3. When does the computer can be attacked by the cyber criminal?
- 4. Who can be the victim of cyber crime?
- 5. Why does everyone need to learn how to secure the computer?

"The anonymous mask which we usually see on the internet is inspired by V for Vendetta"



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# **Hacker Vs Cracker**

## \* Hacker

When we hear the word of "Hackers" perhaps some of us think about people who do cybercrime. The true meaning of hackers actually refers to those who examine the computer deeply and have special expertise in creating and reading certain programs. Hacking can show us the bug within our system, so we can upgrade our system to be better and stronger. When hackers break into the system the intention is only for knowledge. True hackers will restore the system that was damaged and warn the owner of the program to update the security program.



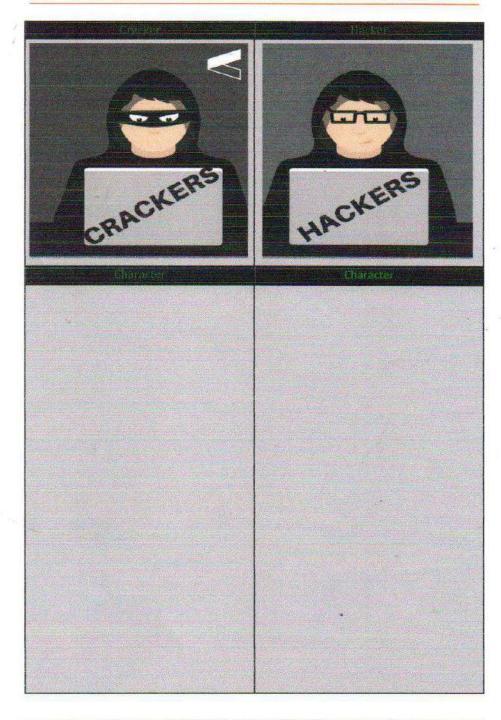
### \* Crackers

There are certain people who use their computer skills only to commit crimes commonly called Crackers. Hackers and Crackers have very small differences. For this reason all things that are related to hacking have bad images. Crackers have negative purposes within their hacking activities such as damaging the security program, destroying the program and even stealing the important data of the victims. In the hacking process, crackers habitually utilize particular tools. Therefore, most of them are unable to restore the data and system that were damaged. Crackers will just abandon the broken data and system.

(Source: https://www.it-jurnal.com/perbedaan-hacker-dan-cracker/)

# Activity 5. Analyzing the characteristic of the objects

Related to the passage above, decide the appropriate character of hacker and cracker.



### Activity 6. Answering the questions

According to the passage above, please answer the following questions!

- 1. What people think when they hear the word of "hacker"?
- 2. What is the correct meaning of hacker?
- 3. Who is cracker?
- 4. Why some people misunderstand about hacker and cracker?
- 5. Why cracker unable to restore the damaged data?

Here is the QR code which you may scan, its content will help you to more understand about the cybercrime and the difference between hacker and cracker.



Or you just follow this link https://www.youtube.com/watch?v=tnoBl0eTY-0



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Asst. Prof. at Sutex Bank College of Computer Applications & Science, Amroli, Surat, Gujarat - 395009, and Kejal Chintan Vadza. "Cyber Crime & Its Categories." *Indian Journal of Applied Research* 3, no. 5 (October 1, 2011): 130–33. https://doi.org/10.15373/2249555X/MAY2013/39.

- content, Tim Fisher Tim Fisher has 30+ years' professional technology support experience He writes troubleshooting, and is the General Manager of Lifewire. "Computer Hardware: Everything You Need to Know." Lifewire. Accessed September 16, 2019. https://www.lifewire.com/computer-hardware-2625895.
- efendi, ilham. "Perbedaan Hacker Dan Cracker." IT-Jurnal.Com, May 1, 2014. https://www.it-jurnal.com/perbedaan-hacker-dan-cracker/.

"File:Virus Malware Hazard Icon.Svg - Wikimedia Commons." Accessed September 16, 2019. https://commons.wikimedia.org/wiki/File:Virus\_malware\_hazard\_icon.sv g.

- IMGBIN.com. "Debugging Debugger Computer Icons Software Bug Programmer PNG - Free Download." IMGBIN.com. Accessed September 16, 2019. https://imgbin.com/png/GFfNKVru/debugging-debugger-computer-iconssoftware-bug-programmer-png.
- Senanayake, Pasindu. "We Are Anonymous. We Do Not Forgive. We Do Not Forget." Medium, June 28, 2017. https://medium.com/parallaxtec/we-areanonymous-we-do-not-forgive-we-do-not-forget-641febe0c43a.

SEPOSITIF. "Kisah Inspiratif Sosok Pendiri Microsoft - Bill Gates." *SEPOSITIF* (blog), January 6, 2017. https://sepositif.com/2017/01/kisah-inspiratif-sosok-pendiri-microsoft-bill-gates/.

- Solms, Basie von. "What South Africa Is Doing to Make a Dent in Cyber Crime." The Conversation. Accessed September 17, 2019. http://theconversation.com/what-south-africa-is-doing-to-make-a-dent-incyber-crime-49470.
- "Troubleshooting Icon Images, Stock Photos & Vectors | Shutterstock." Accessed September 16, 2019.

https://www.shutterstock.com/search/troubleshooting+icon.

"What's the Best Quote from V for Vendetta? - Quora." Accessed September 18, 2019. https://www.quora.com/Whats-the-best-quote-from-V-for-Vendetta.
"What Is Windows?" Accessed August 23, 2019.

https://www.computerhope.com/jargon/w/windows.htm.

"What Is Windows? | Digital Unite." Accessed August 23, 2019. https://www.digitalunite.com/technology-guides/computer-basics/usingcomputer/what-windows.

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# DOCUMENTATION



Picture 1. Interview with English teacher of Vocational High School Teladan of Metro



Picture 2. Product validation

## CURRICULUM VITAE



The name of the writer originally is Riki Andri Prayoga and the official name is Andri Prayoga. He was born in Sukadana, June 28<sup>th</sup> 1996. He is the first and the only child of Basuki Rahmad and Wulandari. He is interested in the critical thinking and addicted to how and why questions.

He was graduated from SD N IV Donomulyo, Bumi Agung, Lampung Timurm in 2007. He decided to continue his study at SMP N 1 Bumi Agung then graduated in 2010. He went to Metro City and chose MAN 1 Metro as his place of study then graduated in 2013. Afterwards, he got a chance to study in AMITY Global Business School. He took ABE Level 4 in Human Resource Management then finished his study in 2014. He went back to Indonesia and became the Human Resource Department (HRD) of IDeA Indonesia in the age of 18. In 2015 he enrolled to IAIN Metro specifically in English Education Department.