DEVELOPING LISTENING SOFTWARE FOR IMPROVING THE LISTENING SKILL OF THIRD-GRADE STUDENTS OF DHARMA MULYA CHRISTIAN SENIOR HIGH SCHOOL SURABAYA

A THESIS

In Partial Fulfillment of the Requirements for the *Sarjana Pendidikan* Degree in the English Language Teaching

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2010

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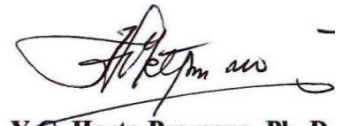

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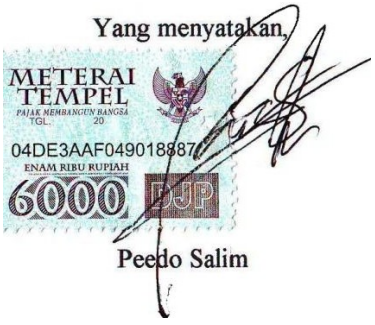

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ACKNOWLEDGEMENTS

Above all, the writer would like to the almighty God for His presence, His guidance, His blessings, His love, and His mercy that enable him to accomplish this thesis in due time.

The writer feels sincerely indebted to those who have given their guidance, encouragement, valuable hours, love, and support that finally bring him towards the completion of his thesis especially to:

1. Y.G. Harto Pramono, Ph.D., the writer's thesis advisor, for his trust, understanding, tolerance and kindness in advising or guiding the writer from the beginning until the finishing touch with full of patience and never-ending support. He has also given his brilliant ideas, valuable comments and suggestions.
2. P. Hady Sutris Winarlim, M. Sc., the Head of the Department, for his support and wisdom during the completion of the study.
3. Drs. Nus Marlessy, the Headmaster of Dharma Mulya Christian Senior High School Surabaya, who has given a chance to conduct several try-outs in the school.
4. All teachers of Dharma Mulya Christian Senior High School Surabaya, especially Dra. Megawati Suyono, the Vice Headmaster, who has provided the information needed for accomplishment of this thesis.
5. All the third-grade students of Dharma Mulya Christian Senior High School Surabaya who have seriously served as the respondents for the questionnaire while conducting the try-outs of the product.
6. The writer’s beloved parents, Kiwajono Salim and Ong Ling-Ling, for their support both mentally and financially and their continuous prayers to the Lord for my success.

7. All lecturers, librarian and staffs of English Department of Widya Mandala Catholic University who have helped the writer from the first semester until he has eventually finished his thesis.
8. Ronny Salim, S. Pd., the writer's eldest brother, who has willingly supported the development of the product by recording his voices. He has spent abundant hours for helping the writer to accomplish the study.
9. The writer's colleagues, Angel and Gemma Holliani Cahya, for continuously supporting the writer in completing the thesis. They were also willing to spend their precious time for recording their voices.
10. The writer's colleagues, Angel, Gemma Holliani Cahya, Edwin Tanujaya, and others whom the writer could not mention one by one since this space is limited, for continuously supporting the writer in completing this thesis.

May Lord Jesus Christ bless all of them.

The writer does realize that this thesis is still far from perfection. Accordingly, comments and suggestions concerning the improvement of this thesis are appreciatively welcome. Eventually, the writer does expect that this thesis and the developed learning software are helpful for those who use and really need it.

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ABSTRACT

Peedo Salim, 2010, *Developing Listening Software for Improving the Listening Skill of Third-Grade Students of Dharma Mulya Christian Senior High School Surabaya*. Bachelor Thesis, English Department of Teacher Training and Education, Widya Mandala Surabaya Catholic University.

Advisor : YG. Harto Pramono, Ph.D.
Keywords : Computer-Assisted Language Learning, Self Learning, Listening Comprehension.

It has been broadly accepted that English is considered as an international language. Accordingly, English is taught as the first foreign language from kindergarten up to high schools. In order to be successful learners of English as a foreign language, we need the mastery of the four language skills, namely: listening, speaking, reading, and writing. Among those skills, listening is the most essential one in communication since people principally hear first before producing sounds.

Learning listening, however, should be supported by adequate learning resources if a successful teaching-learning process is to occur. The reality shows that the limited learning resources have caused the learning of listening skill to be problematic for students. In some senior high schools, the main resources used in learning English are mostly English textbooks. On the other hand, many of textbooks are designed and developed without considering the needs of the school. It, by all means, makes it difficult for some students to comprehend the materials. That problem happened to the students of Dharma Mulya Christian Senior High School Surabaya. Concerning the fact, an improvement of the way in learning listening is prominently needed. Thus, producing and developing an alternative learning resource to learn listening by utilizing computer technology is believed to be able to make the learning more effective and attractive. Computer-Assisted Language Learning is one of the alternative resources to solve the learning problem.

The main objective of this study is to produce CALL software for improving listening skill of the third-grade students of Senior High Schools. The components and design of the software are made in a way that could motivate students to learn listening more effectively and attractively. The

components are attention-gaining materials, learning objectives, content, exercises, tests, and feedbacks.

There were five steps that had been followed in the process of developing this learning software as the product of this developmental study, namely: (1) deciding the material which was going to be developed via needs analysis, (2) identifying the syllabus of the material going to be developed (based on standard of graduate competency), (3) developing the software, (4) producing the software, and (5) conducting product try-outs.

In order to produce good quality software, an evaluation was conducted by experts and it was then used as the basis for the first revision. Furthermore, a series of try-outs by students were done and the results of the try-out were used as the basis for revision in order to improve the quality of the software: (l) individual try-out with three students and the result was used as the basis for the second revision, (2) field try-out with sixty students and the result was used as the basis for the third revision. The subjects were third-grade students of Dharma Mulya Christian Senior High School Surabaya. The data of the try-outs were in the form of percentage and comments and suggestions.

The field try-out as the final try-out of this developed software confirms that:

1. The result of the evaluation on this developed software given by the students is good.
2. The field try-out that involves 60 students shows that this developed software is generally good, attractive, and is appropriate to improve the listening skill of the students and to motivate the students to learn English.

As a conclusion, this developed CALL software has a good quality and can be used as an alternative media for learning listening. In addition, it can be used to improve the students' listening skill and to increase their motivation in learning English, to introduce the model of electronic learning using computer, and the materials are appropriate for third-grade students of Senior High School.

CHAPTER I

INTRODUCTION

CHAPTER I

INTRODUCTION

1.1 Background of the Development

In several developing countries, English is regarded as a second language or foreign language. It is the principal language preferred for international business and communication between countries all over the world. Not only is English used for those fields, but it is also used in all areas of human activities from science, entertainment, politics, education and many others.

The role of English in Indonesia has become extremely significant nowadays due to the rapid world development that demands the people connect with other countries. The Indonesia's Minister of Education in his statement as quoted by Pramono (1996) states that English is intended to provide students an opportunity to gain science and at the same time develop their language of English in anticipation of the environmental condition which has been influenced by the development of science, technology, arts, and cultures such that the knowledge of English is a demand. Many schools today have consequently started to teach English from kindergarten up to high schools. They are anxious to support Indonesian generation from children to adults.

Computer as one of the implementation of technology development is able to support English teachers in dealing with teaching learning process and promoting the learning outcome. Recently most language institutions and schools in Indonesia make use of computers for supporting language teaching and learning process. A number of educators and trainers can generate interactive learning media as an alternative and complimentary

way to be utilized in English language learning. They accept as true that using computers can diminish the students' boredom in becoming skilled at languages. Numerous researches, studies, and class experiments in the use of information technology in language learning, in fact, show that technology carries more advantages and development than disadvantages.

In the study of foreign language, nothing is more difficult than learning to attain information by listening to native speakers. The students learning listening often fail to recognize words and phrases which they could understand if they saw them in print and unfamiliar rhythms of sentences further complicate their task (Allen. 1980:1). In line with that statement, it is essentially more difficult to differentiate a new word by listening than by reading the passage. Listening is the central to language learning. Listening skill serves as the basis for the development of speaking, reading, and writing since children's first language is listening. Before they learn to speak, they acquire their native speech from the sound heard in their home and afterward they reproduce what one says. Therefore, listening is considered as a fundamental and important skill in language learning (Zaytoun. loc cit).

McKeating says, as quoted by Nicholas (1988: 19), that there are 3 reasons why we may possibly feel obligated to teach listening:

1. The fact that listening comprehension is one of the items on some language examinations.
2. Listening is mostly used in all the communicative activities and many enjoyable activities such as listening to the radio, to music and watching television or films.
3. Listening is a medium of instruction in other school subjects. Consequently, the students need to be good listeners in their education.

The skill of listening with comprehension is an essential part of communication and the basic to foreign language learning. As a matter of fact, one needs to improve his listening skill in order to be able to communicate well with other people. Byrne (1976:9) states that listening is really important in communication since people principally communicate in a two-way process between speaker and listener .

People might have no success when they do not have a good listening ability in the language they use to express themselves. Since listening is a skill to understand one's thoughts or ideas, people would not be able to think sufficiently in the language concerned if they do not have adequate listening ability. They can more easily understand and be understood by others if they have good listening skill. Burt cites "In fact, it is difficult to understand thoughts or ideas going on without listening to effectively" (Burt. 1971 .105).

Senior High School students, particularly, really need a good mastery of listening especially those continuing their study at an English Department or abroad. By mastering the listening skill, the students will be able to remember some of the detailed information they have heard in order to answer questions correctly. In addition, listening is exactly useful for the students to widen their knowledge of vocabulary in order to cope with unfamiliar words heard when they listen to spoken English (Sutjipto, 1983:35). It shows that listening can help the students enrich their bank of vocabularies. The students will find new words and some new expressions by practicing listening.

Reacting the importance of listening skill, the increasing use of English in many parts of the world, and the worldwide development of technology, the researcher, representing English Department of Teacher Training and Education Faculty of Widya Mandala Surabaya Catholic

University, has a point of objective to produce learning software to teach listening to the third-grade students of Dharma Mulya Christian Senior High School Surabaya since the students have often encountered boredom in learning listening which gives impact on the students' motivation to learn more, there has been no variation in learning resources of listening exercises provided (still narrow on textbooks), and the listening exercises available in Dharma Mulya Christian Senior High School Surabaya do not practically emerge in operating videos/audios. In addition, there are no available English learning software and learning resources that are developed for being attractive, motivating learners, being an easy-learning source, and individualized in that school. This was confirmed while consulting the problems with the English teacher of Dharma Mulya Christian Senior High School Surabaya.

In regard of the teaching learning process which relies on books often causes students' lack of interest, the development of the learning software is aimed to improve the conventional methods in language learning which mainly depend on textbooks that requires the presence of teachers in the classroom to convey the material. Moreover, it is found that books are not various and the feedback given is totally limited or even not available at all.

As stated by Pramono (1996), unlike books, electronic learning material that is effectively designed will facilitate the achievement of desired learning outcomes. Furthermore, learning by using computer will enable learners to choose the preferred topic, according to their level of ability and will advance learners' motivation in learning.

There have already been quite many learning software available in the market nowadays. Not all software, however, are carefully and

attractively provided with adequate feedback. Feedback in learning software seems to be the most significant aspect because without feedback a learner is left to perform with no sense of direction or measure of correctness (Cates, 1988). Carelessly designed software can possibly block the effectiveness of learning.

As cited above that the use of computer learning software can be one of the ways to solve the difficulties of learning English language, developing effectively-designed software is recommended.

Language acquisition comprises two types, i.e., receptive skills and productive skills. Receptive skills are those as what we have called them Reading and Listening, while the productive skills cover Writing and Speaking. However, to start producing something, in this case writing and speaking, language learners must receive input by reading and listening, in which they will start to gain new knowledge to be used to produce some words, phrases or a sentence. Therefore, by starting to put attention on the teaching of listening more critically, the development of language learners' acquisition in English will improve gradually.

Teaching listening nowadays, however, meets many hurdles that give impact on the students' achievement in English language classrooms. This, of course, is caused by numbers of factors. One of those factors is the teaching and the learning process itself. Since the process is a systematic process, every component is influencing one another to the students' achievement. The fact of the teaching English, for example in Dharma Mulya Christian Senior High School Surabaya, shows that students are less interested in the materials given and to how those materials are presented to them. Though materials are varied, the source is still narrowed on textbooks. The students' motivation to learn listening is evidently falling. Their marks in English especially listening class also show significant

decline. Moreover, in some extent the students seem to neglect instructions in English test, as they are less interested in listening. This fact is then identified as the flaws of the material or the learning sources, in which they are less interested and less motivating. Yet, the essence of learning is that the students learn, which means students have to interact with sources of learning which are used to gain the objective. In this case, alternatives to cope the problems should be taken.

As a controlling though, there is a finding that every class has students with different competences. Thus, there should be a technique to facilitate the teaching to be effective above all diversity in the students' aptitude as also in line with it. To fulfill this need, that a plan of learning should pay attention to individuals, an interactive source as so-called CALL (Computer-assisted Language Learning), is developed to give the learning material an entertaining and enjoyable touch.

The Computer-assisted Language Learning serves the edutainment and gives more credit in individual learning, which increases the motivation of the learners to learn more. In this way, learners then have the freedom to learn according to their own needs and capacity of interests.

It is accepted as true that media can be utilized as functional tools to aid the English teachers and the foreign language learners during the teaching and learning activities. On account of the problems stated above, it is noteworthy to design CALL media (as a functional tool) *properly* to help learners have a better understanding towards the lesson more easily.

Interactivity as one of computer-based learning multimedia modes" is a necessary and fundamental mechanism for knowledge acquisition and the development of both cognitive and physical skills" (Baker, 1994:1). Interaction by means of computers as the media will be developed in this study includes communication or inter-personal-machine contact and

multimedia includes audio (speech, sounds, music), video (text, graphics, pictures, animations, movies) and interactivity (via keyboard, mouse, microphone). The ability to interact with multimedia allows language learners to explore, discover, ponder, search, question, answer and receive feedback.

Taking into account the importance of listening skill as one of the English skills that is tested for *Ujian Nasional* (UNAS) and the roles of computers in teaching and learning processes, the development in this study is to provide interesting and motivating learning software to help improve the listening skill of the students of Dharma Mulya Christian Senior High Schools Surabaya.

1.2 Statement of the Problems

In line with the description presented on the background of the study, the CALL software development for teaching listening finds various problems which appear as follows:

1. The students of Dharma Mulya Christian Senior High School Surabaya encounter boredom in learning Listening which gives impact on their motivation to learn more.
2. There is no variation in learning resources of listening exercises given. In this case, the learning resources are still limited on textbooks which do not support interactive learning.
3. The listening exercises found in Dharma Mulya Christian Senior High School Surabaya commonly do not emerge in operating videos/audios.
4. Interesting and motivating designs for learning material are still inadequate. This does not support individual learning well.

5. There is no available computer software for teaching listening in the market that is organized to be interesting, motivating, individualized, and as an easy-learning source.

1.3 Objectives of the Study

1.3.1 General Objective

This study aims at developing learning software for improving the listening skill of the third-grade students of Dharma Mulya Christian Senior High School Surabaya.

1.3.2 Specific Objectives

1. To improve the listening skill of the third-grade students of Dharma Mulya Christian Senior High School Surabaya.
2. To eliminate boredom in listening activities experienced by the students of Dharma Mulya Christian Senior High School Surabaya.
3. To provide CALL software with various types of learning resources.
4. To facilitate the teaching and learning process of listening skill in Dharma Mulya Christian Senior High School Surabaya completed with videos/audios.
5. To support and motivate self-learning by providing interesting and motivating designs for the learning material.
6. To provide interactive learning source that can be particularly used by the students of Dharma Mulya Christian Senior High School Surabaya.

1.4 Expected Product Specifications

As this learning software is designed and developed through computer, the media could be classified as Computer-assisted Language

Learning software. The CALL software in this study is the developed software. It has several specifications as follows:

1. It can be used to teach listening skill of English (as new material) as unconventional media that can replace course-books or as an accompaniment to course-books.
2. It can also be utilized to help learners study independently. This software, however, is not designed to fully substitute a teacher's role in the classroom.
3. This software can be used as a learning resource that can support the students in preparing for UNAS, especially the Listening examination in English.
4. The material has specific components which can assist learners to learn easily and independently, as follows:

    a. *Attention-gaining Materials*

    To attract learners' attention and arouse untimely motivation so that they are motivated to learn in a positive manner, pictures, animations and sounds are utilized.

    b. *Learning Objectives*

    The software presents learning objectives that contain learning objectives and specific instructional objectives than can direct students to what they learn and reach.

    c. *Content*

    The content is structured in such way that lets the learners understand it straightforwardly. The content of the learning software is organized based on the language functions.

d. Exercises

The exercises are heading for helping learners in comprehending the learning materials and utilizing them in a proper way. The exercises, by all means, are completed with feedback.

e. Tests

The tests are purposely for helping learners measure their understanding and mastery of the subject matter. They are absolutely completed with feedback such as score.

f. Feedbacks

The feedbacks given in the software are intentionally to give responses to students' answers towards the exercises. The students accordingly can autonomously evaluate their own ability in learning the material and know whether or not their answers are correct. Eventually, it can also enhance the learners' motivation in learning.

g. Other Components

Other components can also motivate the learners' motivation in learning English. For instance, the practicality to operate the software with no help from the teacher and the clarity of images, texts, and voice.

5. The product of this developmental study is basically different from the other software that is sold in market due to the fact that this product is completed with learning objectives in each session.

1.5 Significance of the Development

The result of this project is expected to give contribution for learners, teachers as well as for the institution where this project is accomplished. The contribution is then to cope with the teaching and learning problems. It is an attempt of producing and adding the limited learning material that really focuses on the variety of individual ability in acquiring language. Moreover, this development of CALL software is developed to encourage students' motivation in learning listening skill of English.

The development of this learning software is significant since it contributes the following advantages:

1. The software can be used as an alternative learning resource for teaching and learning listening skill of English in any Senior High Schools in Surabaya, particularly in Dharma Mulya Christian Senior High School Surabaya. In this case, the schools need to have computer facilities.
2. As an alternative learning resource, this software can be used for self-learning as well as for learning with teachers.
3. As an alternative source, this software is more fascinating compared to printed learning resources due to the fact that: (a) it is completed with colors, sounds, pictures and animations, (b) there is direct feedback that shows whether or not the students' answer is correct, (c) it presents an enjoyment and reinforcement at once as the students show their performance in each activity by showing complimentary words as "perfect", "marvelous", "you did very well", "try again, please", "keep moving forward", etc.
4. The design used in this software is the Linear Design which is based on the theory of B.F. Skinner, the Stimulus-Response theory. In Linear program, learners walk through one frame to another frame,

or to other unit lesson. Nevertheless, there are also some Branching parts which make possible for the students to get back into the last finished task where the learners had left previously. In this case, the learners can leave or continue learning with the program at anytime it suits them.

1.6 Assumptions and Limitations of the Development

In developing this CALL software for improving the listening skill, the developer notes down a number of assumptions as follows:

1. The development of this software is empirically based on the existing needs.
2. The development of this software is basically designed for self-learning activities. It does not necessarily involve the interaction between teacher and students directly.
3. Instructional animations if properly designed can be used to enhance students' understanding of the learning content.
4. Developing animated learning software can be used to support quality education.
5. A learning process using CD-ROM is appropriately used for computer literacy students.
6. The learning process with this software will be more effective and more efficient for students who have already had computer skills.

The assumptions stated above lead to the considerations of the developer towards the limitations of the development. The limitations are as follows:

1. This software is developed according to the general conditions at Dharma Mulya Christian Senior High School Surabaya, and tested there.

2. Institutions other than Dharma Mulya Christian Senior High School Surabaya, under the same conditions or better, can make use of the final product.
3. This study is intended to develop a self-learning media through CD-ROM.
4. The product try-outs were held only in Dharma Mulya Christian Senior High School Surabaya for the sake of practicality.

1.7 Definition of Key Terms

To avoid any different perception of some important terms which are used in this study, the developer would like to give explanation about terms used before he goes on to further discussion. The technical terms in this study are discussed below.

1. *Computer-Based Teaching*

   A teaching process directly involving a computer in the presentation of the instructional materials in an interactive mode to provide and control the individualized learning environment for each individual student (Joiner; 1982:29).

2. *Computer-assisted Language Learning (CALL)*

   CALL is a form of computer-based learning which carries two important features: bi-directional learning and individualized learning. It is not a method. CALL materials are tools for learning. The focus of CALL is learning, and not teaching. CALL materials are used in teaching to facilitate the language learning process. It is a student-centered accelerated learning material, which promotes self-

paced accelerated learning (http://en.wikipedia.org/wiki/Computer-assisted_language_learning).

3. *Listening Ability*

   The capability of getting the meaning from something we hear (Rost, 2002; 2).

4. *Listening Comprehension*

   The sense of understanding what the language used refers to in one's experience or in the outside world. (Rost, 2002:59).

5. *Dharma Mulya Senior High School Surabaya*

   A Christian Senior High School in Surabaya where the developer carried out this project. It has a digital language laboratory where students can learn independently by using computers.

1.8 Organization of the Thesis

This thesis is divided into two dissimilar parts; the first is analytical process development and the second is the product development in the form of CD-ROM.

The analytical process development consists of five chapters, namely: Chapter I, introduction, which delineates: (a) background of the development, (b) statement of the problems, (c) objectives of the study, (d) expected product specifications, (e) significance of the development, (f) assumptions and limitations of the development, (g) definition of key terms, and (h) organization of the thesis.

Chapter II, review of related literature, is dedicated to describing: (a) theories of listening which consist of the importance of listening, nature of

listening, listening purposes, listening processes, types of listening, listening in language learning and teaching, the principles of teaching listening comprehension, and the process of teaching listening, (b) theories of learning which contain teacher vs. learner-centered instructions and learning styles, and (c) theories of Computer-assisted Language Learning (CALL) which consist of nature of CALL, types of CALL, types of CALL content, three phases of CALL, forms of CALL software, designs of CALL, characteristics of effective CALL software, and the advantages of CALL.

Chapter III, procedures of the development, exemplifies procedures of product prototype development, product try-outs, and previous studies on the use of CALL.

Chapter IV, reports on the result of the development, covers (a) the result of needs analysis, (b) report on the process and result of the development, and (c) Summary of the process of the product development and conclusion of the result of the product development.

Chapter 5, the last part of this thesis, aims to present discussion and suggestions.

The second part of the developmental study is the product of the development itself which is in the form of compact disc (CD-ROM). The interactive CD contains software for learning listening. The software utilizes drill and practice type, and employs linear and branching designs. It also includes some components: (a) attention-gaining materials, (b) learning objectives, (c) content, (d) exercises, (e) tests, (f) feedbacks, and (g) other components.

CHAPTER II

REVIEW OF RELATED LITERATURE

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is devoted to discuss several theories related to the study of developing learning software for improving the listening skill.

2.1 Theories of Listening

2.1.1 The Importance of Listening

The importance of listening in communication is enormous since it is a receptive skill as reading. To start producing something, in this case writing and speaking, language learners must receive input by reading and listening, in which they will start to gain new knowledge to be used to produce some words, phrases or a sentence. In order to communicate effectively people have to be able to hear what the other person is saying. Not just hearing because the acoustics are good or because the other person is speaking in a loud enough tone, but it is also important that people hear what the person is saying because they have taken the time to actively listen. The importance of listening in communication is something worthwhile to consider. Good listeners are often some of the best speakers because they have taken the time to find out what people are truly interested in.

All in all, listening is the basic skill in language learning. Without listening skill, learners will never learn to communicate effectively.

2.1.2 Nature of Listening

Rost (2002; 2) cites that listening is a matter of catching what the speaker says. According to him, in communication, not only are we

listening to what the speaker says, but we also need to process it in our mind until we truly get the meaning of the message. It is principally paying attention and attempting to get the meaning of what we listen to. In this case, Rost"s description about listening is basically supported by Nicholas (1988; 19) and Lyman (1982; 28). Nicholas (1988; 19) claimed that listening is a phase of personal communication that gets close to the core of a human being to seek a basis for understanding. Every human being listens first to understand each other. People would not be able to produce any responses to what the speaker says properly if they do not understand the idea of the message.

Furthermore, Lyman (1982; 28) pointed out that we do not merely listen to obtain and adapt the sound without getting any points of the message. However, we have to focus on the sound in order to process, to understand, to interpret, to evaluate, and eventually to respond to it based on our understanding of the messages. It precisely needs the process of thinking in order to be able to give appropriate responses.

Lyman (1982; 28) listed three (3) significant components in order to be a successful listener as follows:

1. Interpretation of what has been said which leads to understanding.
2. Evaluation which involves weighing the information and deciding how to use it.
3. Responding based on what is heard, understood, and evaluated.

In line with the theories presented above, the writer concludes that listening is a process to understand and get the meaning of what the speaker says so that hearers can produce appropriate responses. In brief, understanding the meaning of the messages is extremely fundamental in a communication. To achieve the goal, one needs to understand what the speaker says and listens to him carefully.

Listening is not a passive activity. It is an active one as it demands active involvement from the hearer (Littlewood, 1981). Therefore, to understand what the speaker says the learner must actively contribute knowledge from both linguistic and non-linguistic sources. Dealing with this, as quoted by Paulston and Bruder (1976:128), Wong (1955) states:

> „The process of speech recognition is an active interplay of guessing, approximation, expectation, and idealization that normally makes extensive use of all redundancies found in a typical speech situation, phonological, morphological, syntax, semantic, as well as many varieties of non linguistic redundancies".

Moreover, Kreidler (1964) confirmed while one is listening, his mind is extremely active receiving and sorting out new ideas and relating them to what he has already known and making new connections with old information.

Rivers (1987) affirmed accurate description that supports the notion that listening is not a passive skill. She presented two levels of activity included in listening to a foreign language: (1) the recognition level and (2) the selection level. The recognition level involves the identification of words and phrases in their structural interrelationships, time sequences, logical and modifying terms, and phrases which are superfluous interpolations adding nothing to the development of the line of thought. The selection level engages in drawing out elements in the communication that contain the gist of message.

In addition, Green and Walter (1971) state that a person who is listening to something needs to be active and pay attention to the sound heard for the purpose of getting meaning from them. Thus, it can be

concluded that listening is not a passive activity since it involves more than just hearing or paying attention.

2.1.3 Listening Purposes

According to Brown and Yule (1983), language communicative functions can be divided into two types: interactional and transactional functions. Students use interactional language to socially interact with each other and their teacher and engage in transactional uses to develop new skills and construct new knowledge. The differences between those two functions are explained on the table 2.1 below.

Table 2.1. The Differences between Interactional and Transactional Purposes

Interactional Purposes	Transactional Purposes
1. The focus is on harmonious communication in social contexts. 2. Interactional uses of language typically include greetings and small talk that center on noncontroversial topics that elicit agreement among the participants. 3. Interactional uses of language do not require careful attention to details and facts.	1. The focus is on conveying information and language use is message oriented. 2. Transactional uses of language include listening to lectures, taking notes, and practicing dictations and cloze exercises that require understanding of details. 3. Transactional language is explicit, clear, and coherent in order for the listener to comprehend the meaning of the message.

2.1.4 Listening Processes

There are two types of processes, bottom-up and top-down, that have been identified as central to listening comprehension. Here are the principles of Bottom-up and Top-down processing:

Table 2.2. The Principles of Bottom-up and Top-down Processes

Bottom-up Processing	Top-down Processing
1. It focuses on individual linguistic components of discourse. 2. Comprehension is viewed as a process of decoding messages proceeding from phonemes to words, to phrases and clauses and other grammatical elements, to sentences.	1. It focuses on macro-features of discourse such as the speaker's purpose and the discourse topic. 2. Comprehension is viewed as a process of activating the listener's background information and schemata (i.e. prior knowledge about the context and the topic) for a global understanding of the message.

Bottom-up processing refers to decoding messages proceeding from phonemes to words, to phrases and clauses and other grammatical elements, to sentences, and using one's knowledge of grammatical or syntactic rules to interpret meaning while top-down processing refers to using background knowledge or previous knowledge of the situation, context, and topic to experience to anticipate, predict, and infer meaning. These two processes involve two (2) skills, micro and macro skills.

1. *Micro Skills*

   Bottom-up processing involves micro skills. Micro means very tiny. In communication, micro refers to the specific parts of it. According to Richards (1983) as quoted by Brown (2004; 121), micro skills focus on the smaller bits and chunks of language involved in a bottom – up process. The skills focus on such things as discriminating sounds in words (especially phonemic contrasts), deducing the meaning of unfamiliar words, predicting content from

the key words, differentiating between fact and opinion, and noting contradictions, inadequate information, and ambiguities. The skills let us understand a communication uttered in high speed from the language used. Richards (1983) split the communication into discrete levels, which can be dealt separately. The following are the eleven (11) micro skills according to Richards (1983) as quoted by Brown (2004; 121):

a. Discriminating among the distinctive sounds of English.
b. Retain chunks of language of different lengths in short-term memory.
c. Recognize English stress patterns, words in stressed and unstressed positions, rhythmic structure, intonation contours, and their role in signaling information.
d. Recognize reduced forms of words.
e. Distinguish word boundaries, recognize a core of words, and interpret word order patterns, and their significance.
f. Process speech at different rates of delivery.
g. Process speech containing pauses, errors, corrections, and other performance variables.
h. Recognize grammatical word classes, system, patterns, rules, and elliptical forms.
i. Recognize that a particular meaning may be expressed in different grammatical forms.
j. Recognize pertinent details in the speech stream.
k. Recognize cohesive devices in spoken discourse.

Those skills above are considered micro skills since they deal with the small units of language such as the grammatical word classes, system, rules, intonation, and rhythmic structure, etc.

2. *Macro Skills*

At this point, top-down processing involves macro skills. Macro indicates large elements. It is focused on the general part of a communication. The skills direct the listeners to constructing meaning based on expectations, inferences, intentions, and prior knowledge. The main point is that in understanding what the communication is about, we need to use our prior knowledge to make a prediction on the basis of the context of a communication. Knowing what the context of the communication is about, we will easily understand the communication and give appropriate responses. To Richards (1983) as quoted by Brown (2004; 121), macro skills are skills that focus on the larger elements involved in a top – down approach to a listening task.

As quoted by Brown (2004; 121), Richards (1983) presented the six (6) macro skills as follows:

a. Retain chunks of language of different lengths in short-term memory.
b. Recognize the communicative functions of utterances, according to situations, participants, and goals.
c. Infer situations, participants, goal using real – world knowledge.
d. Describe, predict outcomes, infer links and connections between events, deduce causes and effects, and detect such

relations as main idea, supporting idea, new information, given information, generalization, and exemplification.

e. Use incomplete sensory data and cultural background information to construct a more complete understanding of a text.

f. Develop and use a battery of listening strategies, such as detecting key words, guessing the meaning of words from context, and signaling comprehension or lack thereof.

Those skills above are considered macro skills since they deal with the discourse functions that use our prior knowledge to make a prediction of the context of a communication.

In this study, the writer utilized both processes (bottom-up process and top-down process) in developing the learning software. However, based on the listening standard of graduate competency of Dharma Mulya Christian Senior High School Surabaya, the writer, in developing the CALL software, only takes five (5) micro and macro skills Richards (1983) as quoted by Brown (2004):

Micro Skills:

1. Recognizing that a particular meaning may be expressed in different grammatical forms. The activity that can be done by the students is that they try to get the idea of the dialogue. Afterwards, they have **to choose the right answer that reflects the idea of a dialogue written in different grammatical forms.**

   For example:

Question

Woman : Would you like milk or sugar in our coffee?

Man : Neither, thank you.

Woman : Sorry, what do you want?

a. Coffee, not tea.
b. Tea, not coffee.
c. Nothing to drink.
d. Black coffee without sugar.
e. Either milk or sugar in my coffee.

The right answer is E.

At this point, the students are required to reflect the idea of the dialogue in different grammatical forms.

2. Recognizing pertinent details in the speech stream. The activity that can be done by the students is that they listen to announcements of airline arrivals and departures. Then, they have to fill in the flight numbers, destinations, gate numbers, and departure times.

   For example:

   Question

   Man : I‟m going to leave for Australia next year.

   Woman : That‟s great! Are you going to study there?

   Man : Yes, I am. I‟ll be there for three years.

   Woman : You‟re so lucky. You can learn many things there.

   Man : I do hope so. Do you think of studying abroad too?

   Woman : Exactly! I am going to Malaysia.

   Man : The weather is quite hot there.

Where is the man going to leave for?

a. Malaysia
b. Australia
c. London
d. America
e. Japan

The right answer is B.
At this point, the question requires the students to give the details of the dialogue.

Macro Skills:

1. Recognizing the communicative functions of utterances, according to situations, participants, and goals. The activity that can be done by the students is that they listen to the expressions that the speakers used in a short conversation, next, they have to **state the other points to express agreements or suggestions.**
   For example:
   Question
   Man : My grandfather passed away yesterday night.

   a. That˝s a good idea.
   b. That˝s very kind of you.
   c. It˝s okay.
   d. He is fine.
   e. I am sorry to hear that.

The right answer is E.

In this case, the question lets the students give the appropriate respond according to the situation.

2. Inferring situations, participants, goal using real – world knowledge.

   The activity that can be possibly done by the students is that they listen to a series of sentences, which may be either statements or questions. After listening to the sentences, they **answer who the speaker is, when and where something happens**.

   For example:

   Question

   Man : Please return to your seat and fasten your seatbelt.
   Woman : Are we getting ready to land?
   Man : No, but there are some turbulence in the air.
   Woman : Oh, I see. But is it okay with the plane?
   Man : There is nothing to be worried about. Turbulence is a common thing in the air.

   Where are the speakers?

   a. In a car
   b. On a plane
   c. On a boat
   d. On a bus
   e. On a street

3. Describing, predicting outcomes, inferring links and connections between events, deducing causes and effects, and detecting such relations as main idea, supporting idea, new information, given

information, generalization, and exemplification. The activity that can be done by the students is that they listen to a short conversation between two friends. Finally, the students have to decide what the speakers are talking about and **find the details that support the topic**.

For example:

Question

For many years, men dominated sports. But today, women compete in most of the same sports that men do. Women‟s professional tennis, basketball, and soccer draw thousands of spectators. In addition, high schools now have women‟s sports teams that compete against one another in the same way that men‟s teams do.

Mariel Margret Hamm, known as Mia, is considered the world‟s best women‟s soccer player. During her college and professional careers, she set almost every soccer record. With her help, The U.S. women‟s team won two gold and two bronze medals in the Women‟s World Cup, and an Olympic gold and silver. Mia retired from international competition in 2004.

What is the main idea of the monologue?

a. Mariel Margaret Hamm is known as Mia.
b. The U.S. women‟s team won two gold and two bronze medals.
c. Mia retired from international competition in 2004.
d. Men dominated sports.
e. Women today compete in most of the same sports that men do.

2.1.5 Types of Listening

Syque (2002) distinguishes listening skill into ten (10) types:

1. **Discriminative Listening**

   It is the most basic type of listening, whereby the difference between different sounds is identified. If the learners cannot hear differences, then they cannot make sense of the meaning that is expressed by such differences.

2. **Comprehension Listening**

   In this type of listening, the learners need to have a lexicon of words at their fingertips and also all rules of grammar and syntax by which they can understand what others are saying to comprehend the meaning.

   Comprehension listening is also known as content listening, informative listening and full listening.

3. **Biased Listening**

   Biased listening happens when the persons hear only what they want to hear. Thus, it is characteristically misinterpreting what the other person says based on the stereotypes and other biases that they have. In short, biased listening is listening through the filter of personal bias.

4. **Evaluative Listening**

   In evaluative listening, the students make judgments about what the other person is saying. They seek to assess the truth of what is being said. They also judge whether or not what the other person

says is good and worthy. Evaluative listening is also called critical, judgmental or interpretive listening.

5. **Appreciative Listening**

   In appreciative listening, the language learners look for certain information which will appreciate. Appreciative listening often occurs when people are listening to good music, poetry or perhaps even the stirring words of a great leader.

6. **Sympathetic Listening**

   In sympathetic listening people care about the other person and show this concern in the way they pay close attention and express their sorrow for their ills and happiness at their joys.

7. **Empathetic Listening**

   In this type of listening, people go beyond sympathy to seek a truer understand how others are feeling. This requires excellent discrimination and close attention to the nuances of emotional signals.

8. **Therapeutic Listening**

   In therapeutic listening, the listener has a purpose of not only empathizing with the speaker but also to use this deep connection in order to help the speaker understand, change or develop in some way.

9. **Dialogic Listening**

   Dialogic listening means learning through conversation and an engaged interchange of ideas and information in which the listeners actively seek to learn more about one person and how he/she thinks.

10. **Relationship listening**

    Relationship listening is also important in areas such as negotiation and sales.

In this developmental study, the researcher developed comprehension listening to be put in the learning software since it really helps the third-grade students of Dharma Mulya Christian Senior High School Surabaya in learning listening.

2.1.6 Listening in Language Learning and Teaching

The ability to detect a sound is hearing, and the ability to attach meaning to it is the foundation for development. This is listening. Listening was first recognized as a major component of language learning and teaching in the late 1970s. At that time, research suggested that language instruction should focus on the learner's listening comprehension in the early stages of acquisition, while delaying oral production until the learner was more familiar with the new language.

Listeners basically make use of metacognitive, cognitive and socio-affective strategies to facilitate comprehension and to make their learning more effective. Metacognitive strategies are very fundamental because they oversee, regulate or direct the language learning process. Cognitive strategies manipulate the material to be learned or apply a specific technique to a listening task. Socio-affective strategies describe the

techniques listeners use to collaborate with others, to verify understanding or to lower anxiety. Research shows that skilled listeners use more metacognitive strategies than their less-skilled counterparts (O'Malley & Chamot, 1990, Vandergrift, 1997a). Listeners who use metacognitive knowledge for successful listening comprehension know how to (1) analyse the requirements of a listening task, (2) activate the appropriate listening processes required, (3) make appropriate predictions, (4) monitor their comprehension, and (5) evaluate the success of their approach. This is precisely critical to the development of self-regulated learning (Wenden, 1998).

Mendelsohn (1998) notes a gap between the interests of listening researchers and classroom practitioners in that classroom materials do very little to develop metacognitive knowledge through raising learners' consciousness of listening processes. It is imperative to teach students how to listen. This shifts the emphasis of listening practice from product to process and the responsibility of learning from the teacher to the student, thereby helping students become self-regulated learners. To achieve that goal, the writer chose computer as the media and therefore develops learning software for teaching listening.

2.1.7 The Principles of Teaching Listening Comprehension

To teach listening comprehension successfully, it is really essential to know several general principles that can aid the students to advance their listening ability (Richards: 1983).

The first principle is that listening comprehension must have specific objectives which are carefully affirmed. In this case, both teacher and students should recognize obviously what the goals of listening comprehension are.

Another principle is that listening comprehension lessons should be constructed carefully and gradually. This means that the listening tasks progress from simple to more complex ones as the students acquire language proficiency. Listening comprehension, moreover, should provide the students with the opportunity to act not only as listeners but also as speakers. In brief, listening comprehension should enable the students to deliver responses on what they have heard so that they are able to ask questions and answer questions. It, by all means, demands active participation from the students.

Listening comprehension lessons, therefore, should foster communicative need for remembering in order to develop concentration. This is done by introducing the topic to the students, discussing it, and relating it to the students" interest and activities.

In line with the principles mentioned above, the writer does agree that in teaching listening, both teacher and learners should firmly identify the goals of the lesson. In addition, the lesson, in fact, should cover the active participation of all the students.

2.1.8 The Processes of Teaching Listening

Clark and Clark (1977) and Richards (1983) say, as quoted by Brown (2001; 249) that there are eight (8) processes involved in comprehending listening as follows:

1. The listener processes what so-called „raw speech" and holds an „image" of it in a short-term memory. This image comprises the elements (phrases, clauses, intonation, and stress patterns) of a stream of speech.

2. The listener determines the type of speech event being processed (e.g. a conversation, or a speech).
3. The listener infers the objectives of the speaker through consideration of the type of speech event, the context, and the content (e.g. the speaker expects to persuade, to request, to announce, to deny, to inform, and so forth).
4. The listener recalls background of information that is relevant to particular context and subject matter. A lifetime of experiences and knowledge is used to perform cognitive association in order to interpret the message.
5. The listener assigns a literal meaning to the utterance. The listener has to learn to go „beneath" the surface of such language in order to interpret correctly.
6. The listener assigns an intended meaning to the utterance. A key to human communication is the ability to match perceived meaning with intended meaning.
7. The listener determines whether information should be retained in short-term or long-term memory.
8. The listener removes the form in which the message which was originally received was quite difficult to be understood. Instead, the important information is retained abstractly.

All of the processes above are extremely important in teaching listening comprehension. They are precisely relevant to a learner"s purposes in learning listening. In developing the learning software, in this study, the developer put those processes as the basis of the content of the product.

2.2 Theories of Learning

2.2.1 Teacher vs. Learner-centered Instructions

According to Huba and Freed (2000), through leaner-centered instructions, students are highly motivated due to the fact that they can construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problem solving and so on. Thus, it enables the students to be actively involved. On the other hand, the students in the teacher-centered classroom do not spend much time working cooperatively and accordingly have less of a working relationship one with another. Besides, they merely will passively receive in information.

Learning trough CALL (Computer-assisted Language Learning) is categorized as student-centered learning, in which students can learn independently and individually without necessarily depending on the assistance of the teachers. Additionally, CALL can allow students to learn at their own pace. Overall, CALL can function as a teacher.

In this study, the use of CALL software for improving the listening skill of third-grade students of Dharma Mulya Christian Senior High School Surabaya does support learner-centered instructions rather than teacher-centered ones.

2.2.2 Learning Styles

Learning styles are basically different approaches or ways of learning. Most people identify that everyone prefers different learning styles and techniques. Mantle (2001) cites seven (7) learning styles as follows:

1. **Verbal (linguistics)**

   This type of learners is fond of reading, writing, and telling stories. They tend to memorize places, dates, and names. They have an extraordinary ability to repeat back everything that their teacher ever told them. These students learn best by saying, hearing, and seeing words.

2. **Logical (mathematical)**

   These students are mathematically inclined. They do enjoy solving problems. Accordingly, they learn best by categorizing, classifying, and working with abstract patterns or relationships. In case their teacher asks them a question, they will be able to give a complete answer. It indicates that they will explain the process and development stages of the relationship. On the other hand, this kind of students will also ask a very complete question to the teacher. Consequently, they will probably ask how things work, how things relate to one another, and why things exist.

3. **Visual (spatial)**

   In this case, the learners are visualizers who mostly spend their day by dreaming, watching movies and staying as far away from reality as possible. They are very good at working with colors and pictures. Besides, they are exceptionally artistic, even though they often find problems expressing it.

4. **Aural (auditory-musical)**

   These students always walk around the house humming a tune, or always needs music to study. These learners are good at noticing

details, pitches, and rhythms that exceed the normal listener. They can learn best through rhythm, melody and music.

5. **Physical (kinesthetic)**

   This type of learners always moves. They continuously walk around, touch everything. And the use body language to convey their feelings. They are the learners who are capable to do more than one thing at a time. They need active education.

6. **Social (interpersonal)**

   This is the „social butterflies". They easily get used to any type of social situation. Because they are patient, understanding, and very empathetic, they generally become good leaders. They also have ability to mediate conflict and are often referred to as „the peacemaker" of the family.

7. **Solitary (intrapersonal)**

   This strong willed people work best alone. They pursue their own interest and have a deep understanding of themselves. By all means, they do best in self-paced instruction, individualized projects, and solitary work.

Teachers can take several learning styles into consideration in teaching English using CALL software because it is a program or learning environment that enables some learning styles at the appointed time. For example, text, graphics, images, and videos are good for students having visual style; audio is good for auditory learning style. In short, learning activities using CALL software are able to cover a large number of learning

styles simultaneously. In concrete terms, it gives the learners control in material selection/sequencing and pace of progress.

Out of the seven learning styles, the developed software in this study applies five styles particularly *verbal (linguistics)*, *visual (spatial)*, *aural (auditory-musical)*, *physical (kinesthetic)*, and *solitary (intrapersonal)*.

2.3 Theories of Computer-assisted Language Learning (CALL)

2.3.1 Nature of Computer-assisted Language Learning

Hick and Hyde (1982) state that students face and interact directly with the computer while using Computer-assisted Language Learning (CALL). CALL, in general, creates individual interaction between computer and students thus what happens to a student will be exactly different from what happens to another student. As a result, an individual will have to be responsible for his or her own acquisition of knowledge.

CALL classrooms, which the main component is computer and/or computer software that are designed to help both teachers and students in teaching learning activities, have a great interactive mode, though in a limit of individuals. Students interact actively with the learning resource, in this case computer software, and vice-versa, with a simple procedure of „pressing a key". This technique is very common in the presentation of instructions using computer.

The procedure of digital-instruction presentation meets the Law of Effect (Burke, 1982). It explicates a so-called „Stimulus- Response" theory which has a bigger probability to be done or to be repeated than behavior. With reference to this Law of Effect, the pleasure of learning can trigger student"s positive mood and the desire to seek more about what is provided by the computer program, which might continuously lead to the success of knowledge transfer and acquisition.

Regarding the Stimulus-Response theory, where subjects are given questions as the stimulus and answer it as a form of a response, the development of CALL thus should include features of “small steps, active responding, and immediate feedback” (Burke, 1982). Moreover, the construction of the materials should follow up the linear or branching program. The linear program (so called as Skinnerian program) enables the students to take steps to choose and/or move from one frame to another frame or unit of lesson (learning module). On the other hand, the branching program specifies the student‟s pace in learning through one single frame or module, and simultaneously directed to other frame in a continuous path frame depends on the student‟s question-answering as a response. As almost all constructed CALL software have these features, and are planned using the linear (Skinnerian program) or branching program, the effectiveness of using this state of the art teaching feature may depend also in the way it invites student‟s participation or interaction towards the software.

Concerning the features offered by CALL in its contribution to develop students‟ self-learning, and supply important feedback for students in learning. This software development, based on Stimulus-Response theory, utilizes both the Linear and Branching programs. Branching parts used in the developed software, however, allow the learners to leave or continue learning with the program at anytime it suits them.

2.3.2 Types of Computer-assisted Language Learning

Hewer (2009) states that there are two (2) distinct types of software applications:

1. **Generic software applications**

   These kinds of applications are not purposely designed for language teaching and learning only. However they are multi-purpose programs. Generic software applications include Word-processors such as Microsoft Word, Presentation software such as Power Point, Email packages, and Web browsers (e.g. online dictionaries, online encyclopedias, online concordancers, news/magazine sites, wiki, blog, etc). The term Generic CALL is also used to describe a package which is designed to cover all aspects of CALL program authoring and interaction.

2. **CALL software applications**

   CALL software applications are particularly language learning programs which aim to support language learning objectives. The way the students learn is generally on the basis of the authors" beliefs. CALL software applications basically support in gaining knowledge about language and in applying the knowledge both in separate and in mixed skill activities.

2.3.3 Types of CALL Content

In terms of the content, CALL software is distinguished into two (2) kinds: content-specific software and content-free software (Burke, 1982).

1. **Content-specific software**

   CALL software can be **content-specific** software in which the teacher cannot change the linguistic content or the format of the activities which rationale that content. Multimedia software provided on CD-ROM is content-specific because it is impossible to make any changes to it.

2. **Content-free software**

   The CALL software does not limit itself into content-specific software but it can also be **content-free** in which the teacher can present the content which the software then uses as data for the pre-programmed activities.

Regarding that the developed software was purposely specific to a particular topic which was proper to the level of the students; the developer applied the content-specific CALL software.

2.3.4 Three Phases of CALL

Warschauer (2009) divides the development of CALL into three (3) phases:

1. **Behaviorist CALL**

   The first phase of CALL, *behaviorist CALL*, is to aid language learning, in the 1950s and implemented in the 1960s and '70s. This model of CALL is based on repetitive language drills that follow behaviorist learning theories. A computer, in this phase, is ideal for carrying out repeated drills which are believed to be helpful or even necessary to learning. In this phase the computer plays *the role of tutor*, giving material and feedback on an individualized basis, allowing students to progress at their own velocity, freeing up class time for other activities, and serving as a medium to deliver instructional materials to the learner.

2. **Communicative CALL**

   Communicative CALL corresponds to cognitive theories that stress that learning is a process of discovery, expression, and development.

The role of computer in this stage is as a tutor and stimulus. In this phase the computer is utilized for skill practice with a greater degree of student choice, control and interaction- not in a drill format. These communicative CALL programs avoid telling students that they are wrong and are flexible to a variety of student responses. They also allow and encourage students to generate original utterances rather than just manipulate prefabricated language (Underwood 1984:52).

3. Integrative CALL

Integrative CALL is based on two important technologies developments: multimedia computers and the Internet. Multimedia technology (Nowadays in the form of CD-ROM) which provides an array of media (text, graphics, sound, animation, and video) is right to use on a single means. To make the multimedia more controlling, *hypermedia*, that links the multimedia resources and enables learners to find out their own pathway merely by pointing and clicking a mouse, is involved.

There are several advantages of hypermedia for language learning. Firstly, considering listening is combined with seeing, just like in the real world, a more reliable learning atmosphere is built. Secondly, skills are without doubt integrated because of the variety of media which unable to combine reading, writing, speaking, and listening in a single activity. Thirdly, students have a great privilege to control over their learning, since they can go at their own speed, going forward and backwards to different parts of the program, working on particular aspects and skipping other aspects overall. The major advantage of hypermedia is to make easy in focusing the exacting

content, without giving up a secondary focus on language form or learning strategies.

Another important technology development is called after the Internet. The internet, built on multimedia technology, can be asynchronous which allows each participant to compose messages at their own time and pace (e.g. email) and synchronous which enables people around the world to have a real-time conversation by typing at their keyboard (e.g. MOOs, facebook, etc).

In this study, the developed software was based on the multimedia computers instead of the internet for the reason that there is no internet connection provided for the students in Dharma Mulya Senior High School Surabaya. Additionally, since the developed software has a non-drill format and avoids telling students that they are wrong and are flexible to a variety of student responses, the phase of this software development is Communicative CALL.

2.3.5 Forms of CALL Software

Kemp and Dayton (1985) mention that there are five forms of learning using computer: tutorial, drill and practice, problem solving, simulations, and games.

Tutorial provides information, asks questions, and makes decisions based on the student‟s responses. It is totally efficient since it gives individual attention to the students who need it. A good tutorial must be interesting and easy to follow. It enhances learning with sound and graphics.

Drill and practice helps the students retain information and utilize skills they have previously learnt, whereas a tutorial teaches a new material.

Students need to be familiar with particular concepts prior to working drill and practice program with the intention of understanding to contents.

Problem solving can be practiced in any content area. It is a process to give a solution about certain problems that exist in teaching learning process. It is emphasizing cooperation and suitable for small groups or individual students. It teaches the students to build up their critical thinking as well.

Simulations are the analog of real life that is life that is given to find out the global meaning of a process. The underlying principles are not, in some occasions, made explicitly; the students have to conclude by themselves from some experiences of the simulations.

Games can encourage students to be a competitive person and increase their will to study. A good game is difficult to design. Therefore, the designer must be firmly sure that when he/she designs a game, the goal of learning is not absent.

2.3.6 Designs of CALL

There are two designs of CALL. Those are Linear and Branching designs. The Linear design presents the student with series of frames that supply new information or reinforce the information learned in the previous frames. The students are free to work through the material at his or her learning pace. The Branching design enables the students to get back into the last finished task where the learners had left previously.

The design used in this software is the Linear Design which is based on the theory of B.F. Skinner, the Stimulus-Response theory. In Linear program, learners walk through one frame to another frame, or to other unit lesson. Nevertheless, there are also some Branching parts used in the

developed software. In this case, the learners can leave or continue learning with the program at anytime it suits them.

2.3.7 Characteristics of Effective CALL Software

As said by Hope, Taylor, and Pussack (1984, p.10), there is an urgent need for more appropriate and relevant programs to enhance students‟ learning process and to lead from the arena of “fun and games” into the realm of effective and marketed, there is no guarantee that all of them are dependable to increase the education. Despite many computer software developed and marketed, there is no guarantee that all of them are able to increase the quality of teaching and learning. To make learning software able to accomplish its objectives accurately, English-learning instructions software should be designed based on the principles of a good teaching and learning. In this case, CALL software should have special characteristics.

According to Burke (1982, p. 23), the most important characteristics of programmed instructions are small steps, active responding, and immediate feedback. CALL as one of the developments of programmed instruction, should automatically have these characteristics also. Furthermore, this study has the intention to develop learning software, which puts into account the theory of Stimulus-Response. Considering the characteristics, there are some specifications of the software as follows:

1. **Attention-gaining Materials**

   The first screen of the software should be attractive and eye-catching. This is intended to gain the learners' attention and to motivate them to learn using the software. Moreover, the pictures or layouts and the design should overall be attention-grabbing as well.

developed software. In this case, the learners can leave or continue learning using the developed software.

2. **Learning Objectives**

   The learning objectives need to be informed to learners before they proceed the learning. The information about learning objectives may guide the students to achieve what they should achieve by the end of the learning process. The learning objectives in this developed software is provided both in written and orally.

3. **Content**

   The content or material must be organized and presented in a good way in order to support the attainment of successful and interesting learning.

4. **Exercises**

   According to Dick and Carey (1985), the process of learning will be successful if it is completed with exercises which are related to the learning objectives. It is given to train learners to be more skillful in mastering the learning objectives or lesson units.

5. **Tests**

   Tests are provided to measure the learners' ability to achieve the learning objectives. The result of the tests can give contribution for students to measure their improvement and their success in learning listening.

6. **Feedbacks**

   The learning process will be more successful if it is completed with adequate exercises. However, these exercises will be ineffective if they are not completed with feedback or information about what they have done (Dick and Carey, 1985).

   A feedback is a vital element in learning via computer software since the software is designed for self-learning. The feedbacks can be given directly in each item in exercises. The feedbacks which are given after answering correctly will reinforce the learner, and will motivate the learner to answer correctly again and again (Dick and Carey, 1985).

7. **The Practicality to Operate the Software**

   The practicality of using this learning software is extremely significant. In other words, this software could be operated by all students without the existence of teachers/trainers to guide them.

2.3.8 Advantages of CALL

There are several advantages of CALL on behalf of teaching integrated skills that totally encourage the students″ learning processes as follows:

1. **Motivation**

   The use of technology inside or outside classroom in fact is inclined to make the class more interesting. CALL software with certain design can promote motivation in students. The software works by personalizing information, for example by equalizing the student″s name as part of the program or task. Besides, motivation could also be aroused by having animated objects on the screen, providing

practice activities that bring about challenges and curiosity and providing a real world or fantasy context in doing the task.

2. Adapting learning to the student

Adapting learning to the student usually means that the student controls the pace of the learning but also means that students can make choices in what and how to learn, skipping unnecessary items or doing remedial work on difficult concepts. The freedom to control the learning makes students feel more competent and confident. Students tend to prefer exercises where they have control over content, such as branching stories, adventures, puzzles or logic problems. With these, the computer has the role of providing attractive context for the use of language rather than directly providing the language the student needs.

3. Active learning conditions

CALL software can also create active learning conditions for students because the students will not passively depend on the teacher (Wu Ligao & Feng Lei, 2003). The students will also stimulated by different modes of materials. For instance, they now have sound to listen to, visual pictures and written language to see as well. These approaches will insist students to actively make use of their five senses.

4. Authenticity

“Authenticity” in language learning means the occasion to interact in one or more of the four skills (reading, writing, listening, and speaking) by using or producing texts meant for an audience in the

target language, not the classroom. With real communication acts instead of teacher-contrived ones, students feel empowered and less afraid to contact others. Students believe they learn faster and better with computer-mediated communication. By using CALL, students will also learn more about cultures in some particular environments. In networked computer environment, students will consciously fell as if they were members of a real community. Accordingly, wherever the students are, they can feel more confident and less nervous in a language learning situation, in addition because errors will not matter so much.

5. Critical thinking skills

Using computer technology in learning language is generally reported to improve self-concept and mastery of basic skills, more student-centered learning and engagement in the learning process, more active processing resulting in higher-order thinking skills and better recall, gain confidence in directing their own learning. This is true for both language and non-language classrooms.

CHAPTER III

PROCEDURES OF THE DEVELOPMENT

CHAPTER III PROCEDURES OF THE DEVELOPMENT

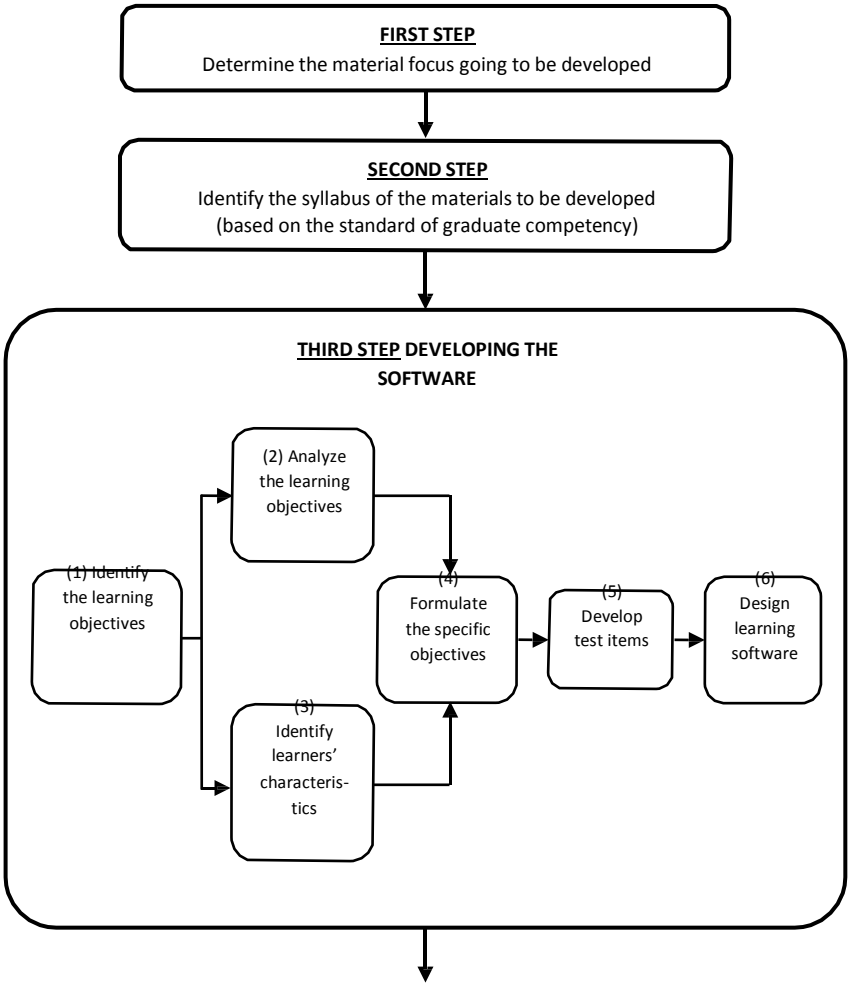
This chapter delineates the procedure of the product prototype development and the product try-out that had been conducted throughout the study. The product prototype development discusses mainly on the steps the writer, as the developer, took in developing the product. In trying out the developed product, the writer discusses the designing of the product try-out, subjects of try-out, types of data, research instruments, and data analysis. Those points will be successively presented in the following sub-chapters.

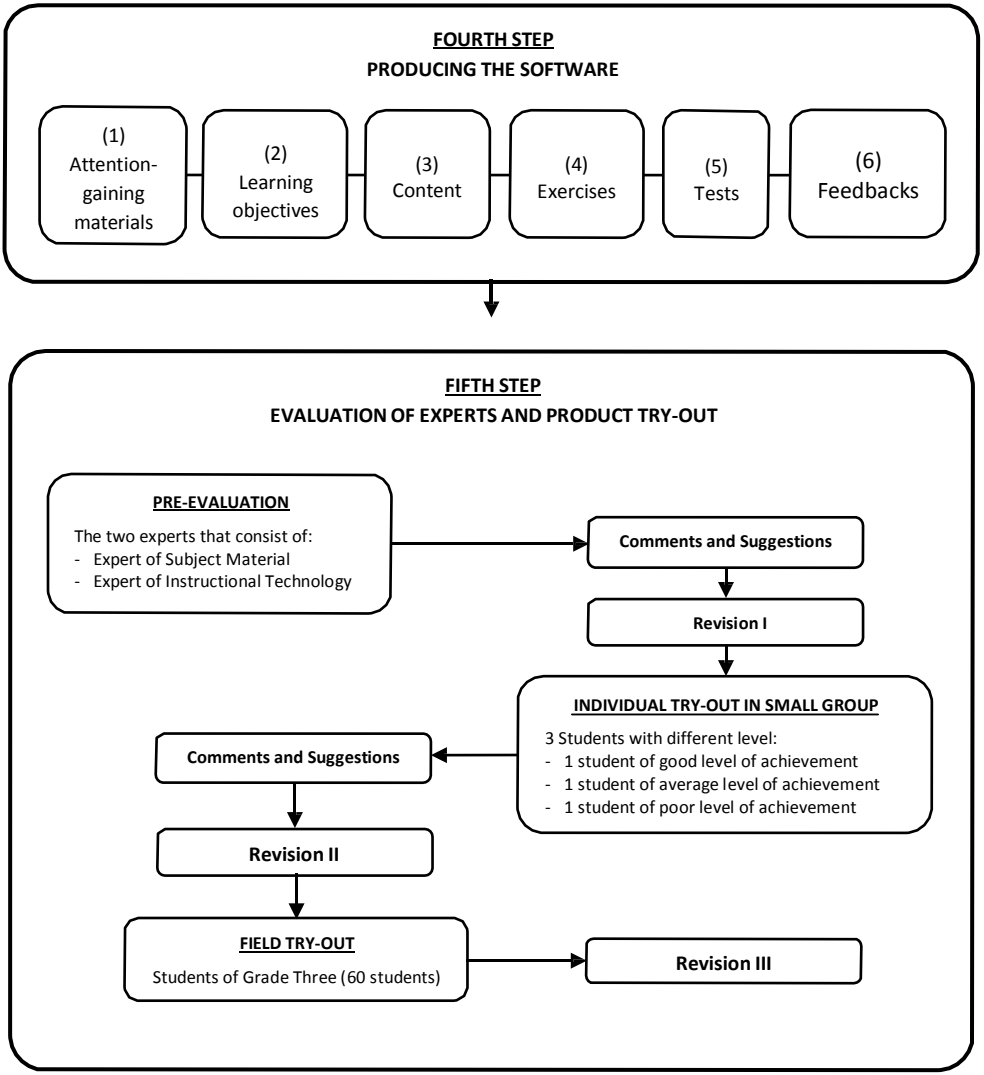
3.1 Procedures of Product Prototype Development

There were five stages that had been followed in the developing the learning software as the product of this study. First, deciding the material focus which was to be developed via needs analysis. Second, identifying the standard of graduate competency of the material that was going to be developed. Third, developing the software throughout 6 steps, namely: (1) identifying learning objectives, (2) analyzing the learning objectives, (3) identifying learners' characteristics, (4) creating the particular instructional objectives of learning, (5) developing items, and (6) designing learning software. Fourth, producing the software that covers 8 components: (1) attention-gaining materials, (2) the instructional objectives, (3) content, (4) exercises, (5) tests, (6) feedbacks, and (7) the practicality to operate the software. Fifth, conducting the product try-outs that comprise an experts' evaluation as the product first evaluation, individual try-out, and field try-out as the third evaluation. The procedures having been done during the

product development are presented diagrammatically as shown in Diagram 3.1 as the modification of Roblyer's design in product development.

Diagram 3.1. Procedures of Product Development
(Modified from the model suggested by Roblyer: 1988)




FOURTH STEP
PRODUCING THE SOFTWARE
(1) Attention-gaining materials
(2) Learning objectives
(3) Content
(4) Exercises
(5) Tests
(6) Feedbacks
FIFTH STEP
EVALUATION OF EXPERTS AND PRODUCT TRY-OUT
PRE-EVALUATION
The two experts that consist of:
- Expert of Subject Material
- Expert of Instructional Technology
Comments and Suggestions
Revision I
INDIVIDUAL TRY-OUT IN SMALL GROUP
3 Students with different level:
- 1 student of good level of achievement
- 1 student of average level of achievement
- 1 student of poor level of achievement
Comments and Suggestions
Revision II
FIELD TRY-OUT
Students of Grade Three (60 students)
Revision III

3.1.1 First Step: Deciding the Material to be Developed through Needs Analysis

The first step that is done in developing the learning software is analyzing the situation in order to grasp ideas upon which the material would be developed. The method used to decide the material is interviewing the English teacher in Dharma Mulya Christian Senior High School Surabaya to find out some trustworthy information about what language skills need to be developed in the CALL software and what topics need to be developed in the form of software. In addition, Needs Analysis Questionnaire is also provided for the teacher. This is to obtain the information whether or not the will-be designed software is required for the students.

3.1.2 Second Step: Identifying the Standard of Graduate Competency of the Material to be Developed

After determining the material to be developed, the next step is to identify the syllabus with the aim of matching the students' competence with the material to be developed.

Based on the Standard of Graduate Competency of Senior High School, the students of Dharma Mulya are supposed to be able to comprehend short functional spoken English texts, conversations, and monologues. The Standard of Graduate Competency of English subject is focused on two skills: Listening and Reading. However, the writer principally focuses on Listening which includes Structure and Vocabulary and is given in an integrative way.

3.1.3 Third Step: Developing the CALL Software

The steps in developing the CALL Software are explained as follows:

1. **Identifying the Learning Objectives**

   The learning objective must be identified as the target of learning prior to developing material in the form of CALL software. The target of learning will be explained in details in the section that presents the specific learning objectives.

2. **Analyzing the Learning Objectives**

   After identifying the general learning objectives, the next step would be analyzing the learning objectives. It is expected to identify certain skills that should be learned and should be mastered by the students and to decide procedural steps that should be completed to achieve the general learning objectives (Dick and Carey, 1985).

3. **Identifying Learners' Characteristics**

   It is very prominent to recognize who would use the software and whether it is used to complete the existing material or as complementary material. The learners' characteristics in general are relevant with the requirements needed in using this CALL software. Furthermore, the condition of the users and how this software would be applied should be identified.

4. **Formulating the Specific Learning Objectives**

   In developing CALL software, or any other learning material, there are two instructional objectives utilized. The first is the *General Instructional Objective (GIO)* which is the major aim hoped by the

developer towards the students after learning using the software. The objective is organized based on the subject matter or topic that is going to be developed. The second was the *Spesific Instructional Objective (SIO),* which is more specific and focused on what knowledge or what skills the students would get after learning the subject matter using the developed software.

5. Developing Test Items

Based on the lists of specific instructional objectives, test items were developed to measure the students' ability in achieving the stated objectives. The writer first constructs test items that are needed to evaluate performance with the criteria on the Specific Instructional Objectives, and afterwards it is continued with developing test items that are parallel with each of the objectives. This is done by determining the types of questions whether it is multiple choice test, subjective test, matching, true-false statement or vice versa. These test items will be put into the developed learning software.

6. Designing the CALL Software

After finishing the previous steps, the developer designs the CALL software that is going to be developed. In designing the software, there are four steps that should be followed in designing the CALL software; (a) selecting the type of the software to be developed, (b) writing storyboard, (c) developing the program, and (d) recording voices.

a. Selecting the Type of the Software

As stated in the first chapter, the design used in this software is the Linear Design which is based on the theory of B.F. Skinner,

the Stimulus-Response theory. In Linear program, learners walk through one frame to another frame, or to other unit lesson. Nevertheless, there are also some Branching parts which make possible for the students to get back into the last finished task where the learners had left previously. In this case, the learners can leave or continue learning with the program at anytime it suits them.

b. Writing the Storyboard

Storyboard is needed to write the content of the material and the model of the material that are going to be developed. Storyboard is written in order to provide a general view and concept about the content of this software development, so that the writer can easily develop the software through the scheme of the content.

c. Developing the Program

The program is set soon after designing the storyboard. The program that is suitable in this study is macromedia flash because it is easy to use and the most interactive program for the time being.

d. Recording Voices

The process of recording voices in developing this CALL software was done for several times due to the fact that the result of the recording was sometimes not satisfying.

3.1.4 Fourth Step: Producing CALL Software

The learning material was developed in the form of software through CD-ROM.

The software which is developed must cover a number of requirements, such as: (1) attention-gaining materials, (2) the instructional objectives, (3) content, (4) exercises, (5) tests, (6) feedback.

1. **Attention-gaining Materials**

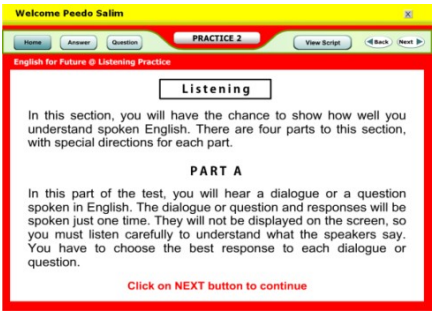
Picture 3.1. Attention Gaining-materials.

Attention-gaining material is one of the most important components in software especially the learning one because it is intended to motivate learners so that they can enjoy and love the subject.

To attract learners' attention and arouse untimely motivation so that they are motivated to learn in a positive manner, pictures, animations and sounds are utilized in the developed software.

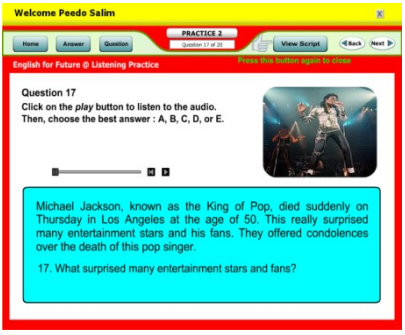
2. **The Instructional Objectives**

The instructional objectives are set in order to give the learners overview of what they will learn. Overall, the instructional objectives in the listening software cover the learner-centered instructions.



Picture 3.2. The Instructional Objectives.

3. Content



Picture 3.3. Content of the Software.

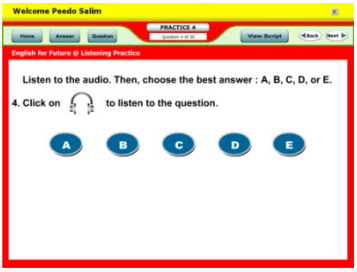
The content of this developed software is systematized into one skill: Listening. The clarity and the attractiveness of the content are supported by view script option that is expected to support the learners in understanding the material.

4. Exercises

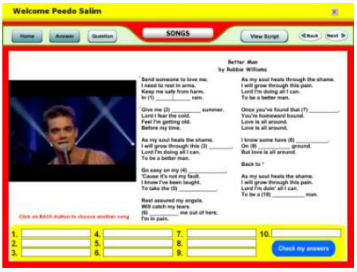
As cited by Dick and Carey (1985), learning process would be successful if it is supported with adequate exercises. The exercises given in this developed software are aimed at helping the students to master the learning material required by the Standard of Graduate Competency particularly listening skill and also to know how well the determined learning objectives have been achieved.

The exercises in the developed software are developed based on the five learning styles particularly *verbal (linguistics)*, *visual (spatial)*, *aural (auditory-musical)*, *physical (kinesthetic)*, and *solitary (intrapersonal)*.

On the scope of difficulties, the exercises provided in this developed product are arranged randomly. The exercises are certainly accompanied with feedback. Here are some exercises in the developed software.



Picture 3.4. Multiple-choice Exercises.



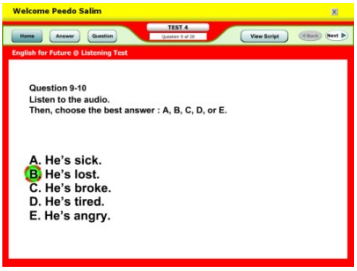
Picture 3.5. Listening-to-songs Exercises.

5. Tests

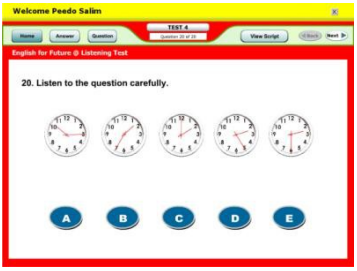
The tests are expected to help learners measure their understanding and mastery of the subject matter. The tests are completed with score as the feedback. In term of the model of the test, the model of the tests in the software is similar to the Senior High School National Test of academic year 2004/2005 which was issued by the National Education Department. According to that model, every test is divided into four different parts: short dialogues, longer conversations, short monologues, and describing pictures.

Since the items provided in the exercises and the tests are the same, the test items in the developed software are also

developed based on the five learning styles particularly *verbal (linguistics)*, *visual (spatial)*, *aural (auditory-musical)*, *physical (kinesthetic)*, and *solitary (intrapersonal)*.



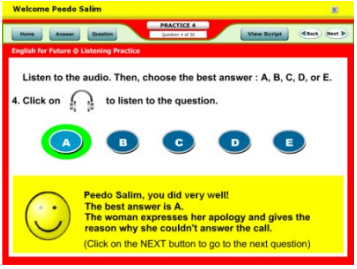
Picture 3.6. An Example of Test.



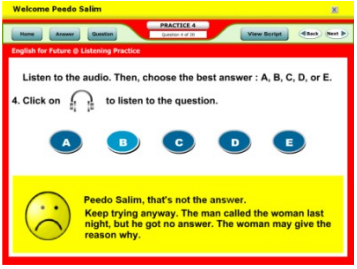
Picture 3.7. An Example of Test.

6. Feedbacks

Feedback is the means by which a learner is able to judge his or her own performance. Without a feedback, a learner is left to perform with no sense of direction or measure of correctness (Cates: 1988). This indicates that feedback is one of the most significant components in computer-based learning material. The feedbacks presented in this developed software are to inform the learners whether or not their answers are correct.



Picture 3.8. Feedback for Correct Answers.



Picture 3.9. Feedback for Wrong Answers.

3.1.5 Fifth Step: Conducting Evaluation by Experts and Product Try-outs

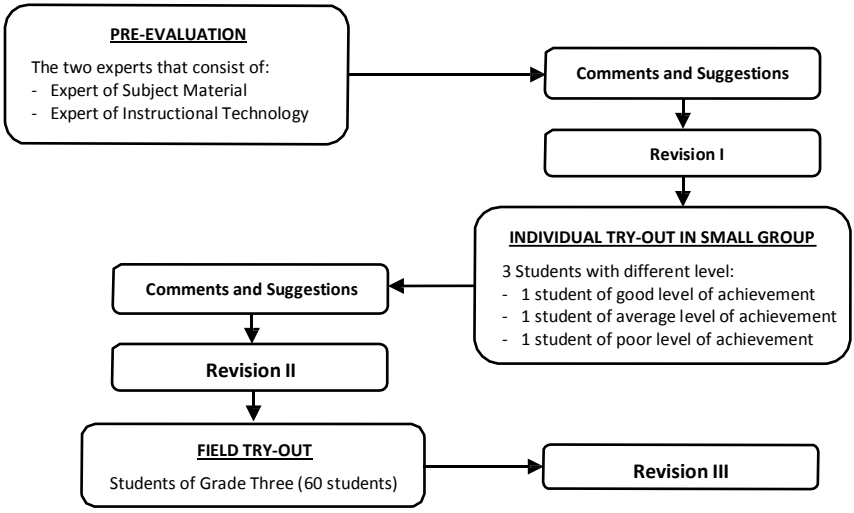
On behalf of gaining the effective product in its usage, the software product was evaluated by a subject specialist and an instructional technologist to get some inputs (comments and suggestions). The comments and suggestions from the experts were used as the foundation in improving or revising the product. After the first revision having been done, the product was tried-out to the real subjects to get data that were used as the basis for revisions. The try-outs were done in two stages: individual try-out and field try-out. The design of product evaluation and try-outs is discussed below.

3.2 Product Try-outs

3.2.1 Design of Product Evaluation and Try-outs

The design of product evaluation and try-outs is diagrammatically shown in Diagram 3.2.

Diagram 3.2. Design of Product Evaluation and Try-outs



3.1.5 Fifth Step: Conducting Evaluation by Experts and Product Try-

1. **Evaluation by the Expert of Subject Material and Instructional Technologist**

   Corresponding to what Dick and Carey (1985) state that a product development needs to be tested by the expert of related subject material, the developed product was consequently evaluated by a subject specialist and instructional technologist. The expert evaluation was to get some inputs for the basis of the first revision.

2. **Individual Try-out in Small Group**

   Having been revised according to the edifying inputs from the experts, the product was afterward tried-out to individual learners who represented three levels of ability (good, average, and poor). It was principally to identify the shortcomings of the product based on the learners. To collect the data of this try-out, the writer utilized an evaluation questionnaire as the instrument.

3. **Field Try-out**

   Soon after being revised anchored in the inputs acquired from the individual try-out in small group, the product was tried-out in the field (large group of real class). Field try-out was the last evaluation carried out and it involved 60 students. In the same vein of the previous evaluation, this try-out was extremely expected to check the effectiveness of the revision having been done. Subsequent to this last evaluation, the developer revised the learning program as well.

3.2.2 Subjects of the Product Evaluation and Try-outs

In this study, the developer chose the third graders of Dharma Mulya Christian Senior High School Surabaya since he had been familiar with this school beforehand.

The subjects of the product evaluation and try-out are presented along these lines:

1. **The Product Pre-Evaluation**

   The subjects of the product evaluation comprised one English teacher and one instructional technologist, in this case the writer's advisor who was the I.T teacher.

2. **The Individual Try-out in Small Group**

   In this period, the subjects of the product try-out were three students: one of good level of achievement, one of average level of achievement, and one of poor level of achievement.

3. **The Field Try-out**

   The final try-out of the learning product was conducted to a classroom which consisted of sixty students.

3.2.3 Types of Data

The type of data used in this development is qualitative data which are taken from evaluation given by subject specialist and instructional technologist. The data is gained from feedback questionnaires, consultation, discussion, and interviews. Additionally, individual try-out and field try-out also result this kind of data, obtained from feedback questionnaires, observation, and interviews.

In spite of the qualitative data, there is also quantitative data which are taken from performance evaluation score and interviews of the students using the product. The data are functioned as consideration for revision and to measure the product's performance.

3.2.4 Instruments and Techniques of Data Collection

In collecting the data, the developer utilized several instruments and techniques as follows:

1. **The Needs Analysis Questionnaire**

   The needs analysis questionnaire was functioned to decide which material needed to be developed in the form of learning software. It was addressed to the English teacher. Additionally, interview was done to find out the teachers' conundrums and the students' difficulties in teaching and learning English.

2. **Evaluation and Feedback Questionnaires**

   These questionnaires were used to get evaluation from the subject specialist, who is the English teacher, from the instructional technologist who is the writer's advisor, and from students about the produced CALL software.

3. **Observation**

   The observation conducted by the time the subjects were learning using the software was to find out: (1) the students' interest on the product, (2) the students' difficulties in operating the software, and (3) students' difficulties in learning the content of the software.

4. **Interview**

   The data was also taken by interviewing the English teacher to verify the topic, and learning difficulties that students usually faced in learning listening. Interview was also conducted during the try-outs (experts' evaluation, individual try-out and field try-out). This was especially done concerning unclear feedback the students gave from the questionnaires.

3.2.5 Techniques of Data Analysis

The acquired data were clustered based on the score provided then analyzed using two dissimilar techniques: (1) the responses to the open format questions given by the subjects of product evaluation and try-outs were scrutinized based on the emergent categories and (2) the data collected were next analyzed based on experts' inputs, reference crosscheck and also by counting their level of effectiveness, usability, accessibility, fitness, suitability, and appropriateness in percentage form.

1. **Interviews and Feedbacks Analysis**

   Qualitative data obtained from feedback questionnaires while the try-outs and the development of the product were analyzed based on the developing categories. Using the technique, the questionnaires were categorized according to its function. The analysis result was eventually utilized to revise the product.

2. **Level of Effectiveness, Attractiveness, Usability, Accessibility, Fitness, Suitability, Appropriateness, Usefulness, Motivation and Independence**

   The attained data from the evaluation questionnaires were analyzed on their level of effectiveness, attractiveness, usability, accessibility,

fitness, suitability, appropriateness, usefulness, motivation and independence in the form of percentage. The result on each element was used as the foundation in revising the product in order to reach a better performance. The formula applied was as follow:

$$\frac{\textbf{(answer x score of each item)}}{\textbf{n (person) x the highest value of score}} \textbf{ x 100 \%}$$

The level of effectiveness, attractiveness, usability, accessibility, fitness, suitability, appropriateness, usefulness, motivation and independence:

81% - 100% → very good

66% - 80% → good/attractive

56% - 65% → fair

0% - 55% → poor

The level of effectiveness, attractiveness, usability, accessibility, fitness, suitability, appropriateness, usefulness, motivation and independence was taken from the school's English mark scheme, in which 70 is the minimum requirement score. The component (n) is the total number of subjects doing the try-out. An example of how to count the element of the product based on the questionnaires is as follows:

If there is one element to be analyzed, and there are 5 subjects who evaluate it and the result is that 3 persons answer (3) and 2 persons answer (4), so the formula would be:

$$\frac{(3 \times 3) + (2 \times 4)}{5 \times 4} \times 100\ \%$$

$= 17 / 20 \times 100\%$

= 85 %

3. Techniques for Inferring Data as the Basis of Revision

Having-been-analyzed data were utilized as the basis of the product revision. However, the data used as the basis of revision were only those which could fulfill the following criteria:

1. Qualitative Data

Qualitative data (comments and suggestions) that were used as the basis of the product revision were those which were:

a. true according to experts (subject expert and computer expert),

b. true according to reference books, and

c. logical for the product developer.

In this case, revision was not dependent on the high quantity of inputs (comments and suggestions).

2. Quantitative Data

Based on the quantitative data, the components that had the level of effectiveness, attractiveness, usability, accessibility,

fitness, suitability, appropriateness, usefulness, motivation or independence less than 70 % (this percentage is taken from the minimum requirement in the school) were revised.

3.3 Previous Studies on the Use of CALL

A number of studies of the implementation of CALL both in the classroom and out of the classroom have been carried out. The studies carried out implemented various kinds of CALL including World Wide Web, email, and CD-ROM. A related study was done by Dita Kumala Dewi (2008) which developed Computer-assisted Language Learning for teaching vocabulary to the second-grade students of Gloria Christian Elementary School II Surabaya. In her study, it was found that the software she developed had good quality and accordingly could help the learners' learning process and improve their achievement.

Another study was done by Panca Eka Septiardi (2008), one of the students of the English Department of Teacher Training and Education Faculty of Widya Mandala Catholic University Surabaya. His study was intended to develop CALL software for teaching reading to the third-grade students of Gloria Christian Senior High School Surabaya.

The studies done both by Dewi and Eka focused on the use of computer-based learning media to enhance the students' learning outcome. Likewise the project done in this thesis also focused on the use of computer-based learning media to be one of the solutions found in the learning process. Both of the studies also confirmed that computer-based learning media could provide positive result to help the students enhance their English proficiency. Even though their language skill or areas they focused on are different, both of their studies showed that the programs they developed could improve the students' skill and ability. The difference of

these previous studies with the developmental research done by the developer was the area of subject developed. In this study, the writer tried to help enhance the listening skill of the third-grade students of Dharma Mulya Christian Senior High School Surabaya. The developed software was constructed through many considerations and thus expected to improve their listening comprehension skill.

CHAPTER IV

REPORTS ON THE RESULT OF THE DEVELOPMENT

CHAPTER IV

REPORTS ON THE RESULT OF THE DEVELOPMENT

This chapter presents the report on the process and the result of the software development. It begins with presenting the report on the result of the needs analysis and is then continued with the report of each stage of the development along with its revision. The data are classified into two types: the qualitative data and the quantitative data. The qualitative data covers the feedback of questionnaires, consultation, discussion, observation, and interviews while the quantitative covers the performance evaluation of the product.

4.1 Result of Needs Analysis

The data of the Needs Analysis were obtained through the questionnaire and interview. Since the time provided by Dharma Mulya Christian Senior High School Surabaya was practically limited, the subject of the Needs Assessment was the English teacher of its school. Needs Assessment of the product was conducted on Saturday, December 12th 2009. The questionnaire was filled out by the English teacher. Besides, the developer did interview to obtain the data from the English teacher as well.

In the questionnaire given to the teacher, the developer attempted to gain the information of:

1. whether she was familiar with CALL and has ever learnt using CALL,
2. whether she was interested to have her students learn using CALL,
3. whether she agreed if the writer developed CALL software for the school,

4. what the students" English skill needed to be developed using CALL software,
5. what language was expected to be used for the developed software,
6. and why CALL software needed to be developed for that school.

While in the interview done with the English teacher, the developer acquired the information of:

1. what difficulties the students encountered while learning Listening,
2. why those difficulties occurred,
3. what topic/material to be presented in the CALL software,
4. and how the material for the developed CALL software would be presented.

The data and the analysis of the Needs Analysis done by the developer are presented in the following sections.

4.1.1 The Data of the Needs Analysis

The result of the needs analysis is shown in Table 4.1.

Table 4.1 Data Analysis of Needs Assessment

a	Do you know about CALL before?	YES
		NO
b	Do you ever use a computer as a media for learning?	YES
		NO
c	Are you interested to have your students learn using CALL?	YES
		NO
d	Do you agree to develop CALL software for teaching language in this school?	YES
		NO
e	What English skills need to be developed using CALL?	LISTENING
		SPEAKING
		READING
		WRITING
f	What language do you expect to be used in the CALL software?	INDONESIAN
		ENGLISH
		BILINGUAL
g	Why does CALL software need to be developed in this school? *I consider that the use of CALL software can create joyful English learning for my students and they are trained to be independent ones.*	

4.1.2 The Analysis of the Result of the Needs Analysis and Interview

The result of the Needs Analysis questionnaire as presented in Table 4.1 is basically to recognize whether or not the development of CALL software for the school is generally appropriate and essential. More than that, the result of the Needs Analysis is also required to determine which language skill should be developed. In addition, the developer also did

interview with the English teacher to gain some information about the difficulties faced by the students while learning Listening and why they occurred. The interview was also to consider what topic/material for the developed CALL software and how it should have been presented.

The data shown in Table 4.1 were the data collected from the English teacher of the school. Based on the data presented on Table 4.1, it can be concluded that:

1. The subject seemed to have been familiar with CALL and had ever studied using CALL software.
2. The subject was interested to have her students learn English using CALL software and agreed to have CALL software developed for the school.
3. The English teacher decided that the students" skill needed to be enhanced using CALL software was Listening. It was due to the fact that the students" achievement in listening skill was low.
4. The English teacher also claimed that the language used in the CALL software would better be English.
5. The English teacher considered that the use of CALL software could create joyful English learning for her students and they would be trained to be independent ones.

The data obtained from the interview done with the English teacher were presented as follows:

1. The students of Dharma Mulya Christian Senior High School Surabaya encountered boredom in learning Listening which gave impact on the students" motivation to learn more.
2. There was no variation in learning resources of listening exercises given. In this case, the learning resources were still narrow on textbooks which did not support interactive learning.

3. The listening exercises in Dharma Mulya Christian Senior High School Surabaya did not practically emerge in operating videos/audios.
4. Interesting and motivating designs for learning material were still inadequate. This did not support individual learning well.
5. There was no available computer software for learning listening that was organized for being interesting, motivating learners, being an easy-learning source, and individualized.
6. The topic/material expected to be presented in the developed CALL software should have been in line with the standard of graduate competency of Senior High School which covered many different aspects such as:
    1. Finding general idea, particular information, and details of a conversation.
    2. Giving appropriate responds towards conversations which comprise:
        a. Expressions of sympathy,
        b. Expressions of condolences,
        c. Expressions of asking and offering advice,
        d. Expressions of likes and dislikes, surprise, ability and inability, apology,
        e. Expressions of offering, accepting, and refusing help, invitation, and permission,
        f. Expressions of please and displease,
        g. Expressions of agreement and disagreement, and
        h. Expressions of satisfaction and dissatisfaction along with responding to dissatisfaction.

3. The listening exercises in Dharma Mulya Christian Senior High acquired from conversations.
4. Determining appropriate pictures based on monologue texts uttered.
5. Finding general idea, particular information, and details of monologue texts uttered.

4.2 Report on the Process and Result of the Development

As having been explained in chapter III, the process of the development was done in steps and the result of the development of each step was evaluated via try-out to obtain data used as the basis for revising the product so that the product gradually became better.

The process of developing this learning software has been presented in chapter III. The development was done in December 2009 to January 2010. The story board was verified by the expert of subject to get some input, suggestions, and comments for revision.

After the subject specialist had verified the storyboard, it was revised by the developer based on the suggestions given and then the developer began to design the software and the way to operate the software. The process of designing the software and the way to operate it was conducted in January 2010. After having finished designing the software, the developer started to record voices to be used for the learning software. In the process of producing the software, there were some problems that had to be solved, i.e., the punctuation marks and incomplete instruction, etc.

In addition, some problems related to the voice recordings (mispronunciations) also appeared. This was verified by the instructional technologist. There were quite many difficulties in solving the problems; however by trying hard again and again, all the difficulties were resolved

successfully. Then the product was evaluated by the instructional technologist and the subject specialist and was then revised based on the suggestions given by them. The product was finished in late January 2010 and was then tried out to small group of learners (individual try-out) in February. After being revised, it was continued to the second try-out that was done by a large group of students. After finishing the last try-out, this product was revised for the final result.

4.2.1 Pre-evaluation by the Subject Specialist and Instructional Technologist

The responses from subject specialist and instructional technologist were in the form of quantitative and qualitative data, which were collected via interview, discussion and a written questionnaire. The quantitative data were in the form of variables along with their percentage while the qualitative data were in the form of suggestions and comments given by the experts.

The pre-evaluation of the product was conducted on February 15th, 2010 and February 16th, 2010. The expert evaluation towards the developed CALL product conducted on February 15th, 2010 was done by the subject specialist who was the English teacher of Dharma Mulya Christian Senior High School Surabaya. The latter expert evaluation conducted on February 16th, 2010, was done by the instructional technologist, in this case, the writer‟s advisor. The pre-evaluation done by the instructional technologist and the subject specialist was conducted to evaluate the product‟s physical performance concerning the operation and the appearance of the learning software and the contents or materials supported with the computer instruction. The quantitative data of this pre-evaluation is shown in Table 4.2.

Table 4.2. The Result of Pre-evaluation

No.	Variables			Respondents (f)	Percentage	
					Sub-Variables	Total Average
1	**The Effect of the Audio-Visual and Software Design**					
	a	Effectiveness in gaining learners‟ attention	very effective	1	88%	**92%**
			effective	1		
			not effective			
			not effective at all			
	b	Effectiveness in motivating learners to learn	very effective	2	100%	
			effective			
			not effective			
			not effective at all			
	c	Attractiveness of the software design	very attractive		75%	
			attractive	2		
			not attractive			
			not attractive at all			
	d	Quality of the pictures	very good	1	88%	

			good	1		
			bad			
			very bad			
	e	Quality of the songs and the videos	very good	2	100%	
			good			
			bad			
			very bad			
	f	Clarity of the sounds/recordings	very clear	1	88%	
			clear	1		
			not clear			
			not clear at all			
	g	Relevance of the design with the learners and the content	very relevant	2	100%	
			relevant			
			not relevant			
			not relevant at all			
	h	Relevance of the texts and images presented with the topic	very relevant	2	100%	

			relevant			
			not relevant			
			not relevant at all			
2	**Usability and Accessibility**					
	a	Organization of the navigation buttons	very well-structured	1	88%	**90%**
			well-structured	1		
			not well-structured			
			not well-structured at all			
	b	Accessibility of the navigation buttons of the software	very easy	1	88%	
			easy	1		
			not easy			
			not easy at all			
	c	Usability and clarity of the navigation buttons (whether the buttons represent their functions or not)	very clear	2	100%	
			clear			
			not clear			
			not clear at all			

	d	Clarity of the instructions in the software	very clear	2	100%	
			clear			
			not clear			
			not clear at all			
	e	Appropriateness of the font size in the software	very appropriate	1	88%	
			appropriate	1		
			not appropriate			
			not appropriate at all			
	f	Appropriateness of the size of the videos in the software	very appropriate		75%	
			appropriate	2		
			not appropriate			
			not appropriate at all			
3	**Fitness of the Developed Software with Its Purposes**					
	a	Appropriateness of the level of difficulty of the software for the level of learners	very appropriate	1	88%	**92%**
			appropriate	1		
			not appropriate			

			not appropriate at all			
	b	Suitability of the medium (computer) that is used to present the materials	very suitable	1	88%	
			suitable	1		
			not suitable			
			not suitable at all			
	c	Clarity of the formulation of the instructional objective	very clear	2	100%	
			clear			
			not clear			
			not clear at all			
4	**Suitability of Learning Content**					
	a	Organization of the content in the software	very well-structured	1	88%	**85%**
			well-structured	1		
			not well-structured			
			not well-structured at all			
	b	Suitability of the content to its audience	very suitable	2	100%	
			suitable			

			not suitable			
			not suitable at all			
	c	Appropriateness of the types of the problems	very appropriate		75%	
			appropriate	2		
			not appropriate			
			not appropriate at all			
	d	Informativeness of the feedbacks	very informative		75%	
			informative	2		
			not informative			
			not informative at all			
5	**Time Management**					
	a	Appropriateness of the time allocation for 1 exercise, 1 test, and extra practice in 90 minutes	Yes	1	-	-
			No	1		

"f" stands for frequency.

"Sub-variables" represents the percentage of each variable which calculated according to the formula of "Level of Effectiveness, Attractiveness,

Usability, Accessibility, Fitness, Suitability, Appropriateness, Usefulness, Motivation and Independence Analysis".

"Total Average" is the total average of each variable.

Data Analysis

From the findings as shown in Table 4.2, there are several conclusions to make:

1. **Analysis on the effect of the audio-visual and software design**
   a. It was found that one respondent was firmly sure that the software was totally effective to attract learners" attention and the other respondent believed the software was effective to attract learners" attention. This was confirmed with the attractiveness level of 88% on this sub-variable. Thus, both respondents agreed that the software was effective to attract learners" attention.
   b. Both respondents confidently affirmed that the software was really able to motivate learners to learn. This sub-variable got 100% on the analysis of the effect of the audio-visual and software design.
   c. Concerning the software design, both respondents had the same opinion that the design of the software was eye-catching. This sub-variable obtained 75% on the analysis of the effect of the audio-visual and software design.
   d. It was found that one respondent claimed that the pictures presented in the software were extremely excellent and the other respondent admitted that the pictures were good. Accordingly, to both respondents, the pictures presented in the software were

basically good. This sub-variable obtained 88% on the analysis of the effect of the audio-visual and software design.

e. Both respondents positively confessed that the songs and videos in software were extremely outstanding. This was proven with the quality level of 100% on this sub-variable.

f. One respondent thought that the quality of the sounds/recordings used in the software were very clear. The other respondent believed that the sounds/recordings were clear. Generally, both respondents agreed that the sounds/recordings used in the software were essentially clear. This sub-variable got 88% on the level of clarity analysis. To conclude, the sounds/recordings in the software were very clear.

g. Both respondents confirmed that the design of the software was particularly relevant with the learners and the content. It was proven with the appropriateness level of 100% on this sub-variable.

h. The two respondents truly considered that the texts and pictures in the software were completely relevant with the topic. This sub-variable got 100% on the level of relevancy analysis.

In general, the developed learning software obtained 92% in Total Average which concluded that the **e**ffect of the audio-visual and software design was extremely excellent.

2. Analysis on the Usability and Accessibility of the Developed Software

a. It was found that one of the respondents claimed that the organization of the navigation buttons used in the developed

software was very good and the other respondent said it was good. Therefore, it can be concluded that both respondents acknowledged that the navigation buttons used in the developed software were principally well-structured. This sub-variable got 88% on the level of usability analysis.

b. Relating to the accessibility of the navigation buttons utilized in the software, one respondent stated that the software was very easy to navigate and the other respondent felt that it was easy to navigate as well. Overall, both respondents basically affirmed that the developed learning software were easy to navigate. This sub-variable acquired 88% on the level of accessibility analysis.

c. Regarding the usability and clarity of the navigation buttons used in the software, both respondents claimed that the navigation buttons in the software presented their functions very clearly. This was confirmed with the usability level of 100% on this sub-variable.

d. Both respondents firmly agreed that the instructions given in the developed software were all very clear. This was confirmed with the usability level of 100% on this sub-variable.

e. Relating to the font size used in the software, one of the respondents stated that the font size was very appropriate. The other respondent claimed that the font size in the software was adequately appropriate. Consequently, it can be concluded that both respondents acknowledged that the font size used in the developed software was appropriate. This sub-variable acquired 88% on the level of usability analysis.

f. Both respondents stated that the size of the videos presented in the software was appropriate. This sub-variable acquired 75% on the level of usability analysis.

All in all, the usability and accessibility of the developed software got 90% in Total Average which proved that the developed learning software was very easy to use and access.

3. Analysis on the Fitness of the Developed Software with Its Purposes

a. One of the two respondents affirmed that the level of difficulty of the software was very appropriate for the level of the learners. The other respondent stated that the level of difficulty of the software was appropriate enough for the level of the learners. This was verified with the fitness level of 88% on this sub-variable.

b. One respondent agreed that the medium (computer) was very suitable for delivering the materials. The other respondent confirmed that the medium for delivering the materials was adequately suitable. This sub-variable acquired 88% on the analysis of the fitness of the developed software with its purposes.

c. Both respondents concluded that the developed software was absolutely able to achieve its objectives. This means that the formulation of the instructional objectives was very clear. This sub-variable acquired 100% on the level of fitness analysis.

Overall, the suitability of the developed software with its objectives got 92% in Total Average. Therefore, it can be

concluded that the fitness of the software with its objectives was very good.

4. Suitability of Learning Content

a. It was found that one of the respondents claimed that the organization of the content in the software was very well-structured and the other respondent claimed it was well-structured. It can consequently be concluded that both respondents acknowledged that the content of the software was primarily well-structured. This sub-variable got 88% on the level of suitability analysis.

b. Regarding the suitability of the content of the software to its audience, both respondents decisively stated that the content of the developed software was extremely suitable to its audience (third graders of Senior High School). This was verified with the suitability level of 100% on this sub-variable.

c. Both respondents admitted that the types of problems in the developed software were appropriate. This sub-variable got 75% on the appropriateness of fitness analysis.

d. Both respondents concluded that the feedbacks provided by the learning software were informative. This was verified with the suitability level of 75% on this sub-variable.

In general, the developed software acquired Total Average of 85% for the suitability of learning content. Accordingly, it can be concluded that the learning content of the developed software was exceedingly suitable for the target learners.

5. Time Management

a. One of the two respondent stated that the time allocation of 90 minutes for one exercise, one test, and finally extra practice was appropriate. In contrast, the other respondent differently thought that the time allocation was inappropriate because it was so long that might make learners bored. Therefore, there would be a revision for this part according to the respondents" suggestion.

As a conclusion, the time allocation needed to be revised based on the respondents" suggestion.

As mentioned before, not only were the quantitative data but also qualitative ones. Comments and suggestions (inputs) were considered as the qualitative data that were to be used for the basis of developed software revision. The positive inputs and the shortcomings and suggestions from the subject specialist and the instructional technologist are coherently presented in Table 4.3 and Table 4.4.

Table 4.3. The Positive Inputs from the Subject Specialist and the Instructional Technologist

No	Variables	Positive Inputs
1	The **e**ffect of the audio-visual and software design	The software was very interesting and must be able to attract learners" attention. The songs and videos in the software were extremely wonderful as they could encourage learners to learn more and more.

2	The usability and accessibility of the developed software	The navigation buttons were practically clear. The instructions provided in the software could effectively guide learners in learning. The texts were very clear so that learners could enjoy the software.
3	The fitness of the developed software with its purposes	The level of difficulty is appropriate for the level of the learners. The materials were very appropriate to be delivered using computer. The developed software could improve learners‟ listening ability.
4	The suitability of learning content	The types of problems in the software were appropriate for its audience. The feedbacks were basically helpful.
5	Time management	None

Table 4.4. The Shortcomings and Suggestions from the Subject Specialist and the Instructional Technologist

No	Variables	Shortcomings and Suggestions based on Expert Evaluation
1	The **e**ffect of the audio-visual and software design	There were some mispronunciations found. Several problems with punctuation marks. There were a few texts which were not arranged properly.
2	The usability and accessibility of the developed software	The instruction for one of the practices had not been recorded. It was advisable to enlarge the size of the videos in the developed software.
3	The fitness of the developed software with its purposes	None
4	The suitability of learning content	Problems with several tenses used in the Extra Practice section. It was required to correct the inappropriate tenses in the software. There were some wrong feedbacks that might puzzle learners. It was advisable to change a few multiple choice questions into Yes-No questions. It was fundamental to add some more pictures to make the software more interactive and eye-catching. Mistyping in a text. In this case, the problems involved small letters and capital letters. Thus, it was necessary to correct the mistyping.

		Some problems in choosing appropriate letters (capital or small letters).
5	Time management	The time allocation of 90 minutes was too long and could possibly make learners bored. It was advisable to provide 45 minutes for learning using the developed software.

According to the data obtained shown in Table 4.3 and Table 4.4, the software had been evaluated very well and had consequently gained positive inputs along with its shortcomings. After being evaluated by the subject specialist and the instructional technologist, the developed learning software was then revised according to the suggestions from them. Precisely, the software was eventually ready to be tried-out to the real subjects.

4.2.1.1 Revision of the Product (1st Revision)

The data of the first product revision are presented in Table 4.5.

Table 4.5. The Problems to Revise and the First Revision

No	Variables	Problems to Revise	Revision I
1	The **e**ffect of the audio-visual and software design	There were some mispronunciations such as: 1. Special /'spæʃəl/ 2. Steward /'stji: əd/	The mispronunciations were revised to be the correct ones such as: 1. Special /'speʃəl/ 2. Steward /'stju: əd/

		Several problems with missing punctuation marks. In this part, there were some missing punctuations in some texts. Ex: apostrophe („), period (.), etc.	All the texts in the software were checked again and then revised if there were missing punctuation marks.
		Several texts were not really well-structured.	The unwell-structured texts were rearranged to be better.
2	The usability and accessibility of the developed software	The instruction for one of the practices had not been recorded.	The instruction was recorded very well. It then produced a good one.
		The size of the videos was needed to be enlarged.	This part was not revised due to the fact that the quality of the videos would have dramatically decreased if the videos had been made larger.
3	The fitness of the developed software with its purposes	None	None
4	The suitability of learning content	Problems with several tenses used in the Extra Practice section. It was required to correct the inappropriate tenses in the software. In this point, the tenses should have been in past forms such as:	The inappropriate tenses which were in present forms were changed into past forms.

		Mater and the Ghost Light 1. What **angers** the ghost light more than anything? *The Cat Returns* 1. Who **comes** to meet Haru in the middle of night? 2. Who **finds** that the wall is fake?	*Mater and the Ghost Light* 1. What **angered** the ghost light more than anything? *The Cat Returns* 1. Who **came** to meet Haru in the middle of night? 2. Who **found** that the wall was fake?
		There were some wrong feedbacks that might puzzle learners.	All feedbacks in the software were checked again and corrected if needed.
		It was advisable to change a few multiple choice questions into Yes-No questions such as: 1. Was the cat killed? a. Yes, it was. b. Yes, it wasn‟t. c. Yes, it did. d. No, it didn‟t. e. No, it wasn‟t. 2. Would Haru come to the cat kingdom? a. Yes, she wouldn‟t. b. No, she would. c. Yes, she would. d. No, she wouldn‟t. e. Yes, she will.	Some multiple choice questions were changed into Yes-No questions. 1. Was the cat killed? a. Yes, it was. b. No, it wasn‟t. 2. Would Haru come to the cat kingdom? a. Yes, she would. b. No, she wouldn‟t.

		It was fundamental to add some more pictures to make the software more interactive and eye-catching.	Adding several pictures to help learners more understand by visualizing the pictures.
		There was a mistyping in a text: “faTher”.	The mistyping text was corrected to be “father”.
		Some problems in choosing appropriate letters (capital or small letters) such as: 1. Why did Haru become smaller? Because she was ... a. **I**n the cat kingdom. b. **T**oo confident. c. **H**ungry. d. **S**lim. e. **N**ot confident. 2. Why did Haru‟s friends laugh at her? Because …. a. **S**he was tired. b. **S**he was ugly. c. **S**he was late. d. **S**he didn‟t bring books. e. **S**he was funny.	The inappropriate capital letters presented in the choices were changed into small letters. 1. Why did Haru become smaller? Because she was ... a. **i**n the cat kingdom. b. **t**oo confident. c. **h**ungry. d. **s**lim. e. **n**ot confident. 2. Why did Haru‟s friends laugh at her? Because …. a. **s**he was tired. b. **s**he was ugly. c. **s**he was late. d. she didn‟t bring books. e. **s**he was funny.

5	Time management	The time allocation of 90 minutes was so long that might make learners bored.	The time allocation was changed into 45 minutes.

4.2.2 Individual Try-out

After being revised, the developed learning software was then tried out by a group of three students (Individual Try-out). The individual try out of the revised product was conducted on February 23rd 2010.The developer got three third graders (1 student with good level of achievement, 1 student with average level of achievement, and 1 with poor level of achievement) to try the product out. The try out was done in the digital language laboratory of Dharma Mulya Christian Senior High School Surabaya. Similar to the pre-evaluation of the product which was carried out by the subject and computer specialists, the individual try out was objectively to obtain quantitative and qualitative data. The quantitative data were in the form of variables along with their percentage while the qualitative data were in the form of suggestions and comments given by the subjects of the try out. The quantitative data gained from this individual try out is presented in Table 4.6.

Table 4.6. The Result of Individual Try-out

No.	Variables			Respondents (f)	Percentage	
					Sub-Variables	Total Average
1	**The Effect of the Audio-Visual and Software Design**					
	a	Attractiveness of the whole software	very attractive	3	100%	**90%**
			attractive			

			not attractive			
			not attractive at all			
	b	Attractiveness of the software design	very attractive	1	83%	
			attractive	2		
			not attractive			
			not attractive at all			
	c	Quality of the pictures	very good	2	92%	
			good	1		
			bad			
			very bad			
	d	Quality of the songs and the videos	very good	2	92%	
			good	1		
			bad			
			very bad			
	e	Clarity of the sounds/recordings	very clear		75%	
			clear	3		

			not clear			
			not clear at all			
	f	Clarity of the texts presented in the software	very clear	3	100%	
			clear			
			not clear			
			not clear at all			
2	**Usability and Accessibility**					
	a	Organization of the navigation buttons	very well-structured	1	83%	**90%**
			well-structured	2		
			not well-structured			
			not well-structured at all			
	b	Accessibility of the navigation buttons of the software	very easy	1	83%	
			easy	2		
			not easy			
			not easy at all			
	c	Usability and clarity of the navigation buttons (whether the	very clear	2	92%	

		buttons represent their functions or not)	clear	1		
			not clear			
			not clear at all			
	d	Clarity of the instructions in the software	very clear	3	100%	
			clear			
			not clear			
			not clear at all			
	e	Appropriateness of the font size in the software	very appropriate	3	100%	
			appropriate			
			not appropriate			
			not appropriate at all			
	f	Appropriateness of the size of the videos in the software	very appropriate	1	83%	
			appropriate	2		
			not appropriate			
			not appropriate at all			

3	**Fitness of the Developed Software with Its Purposes**					
	a	Appropriateness of the level of difficulty of the software for the level of learners	very appropriate		75%	
			appropriate	3		
			not appropriate			
			not appropriate at all			
	b	Suitability of the medium (computer) that is used to present the materials	very suitable	2	92%	**86%**
			suitable	1		
			not suitable			
			not suitable at all			
	c	Clarity of the formulation of the instructional objectives	very clear	2	92%	
			clear	1		
			not clear			
			not clear at all			
4	**Suitability of Learning Content**					
	a	Attractiveness of the exercises in the software	very attractive	1	83%	**87%**
			attractive	2		

			not attractive			
			not attractive at all			
	b	Suitability of the content to its audience	very suitable	1	83%	
			suitable	2		
			not suitable			
			not suitable at all			
	c	Attractiveness of the songs and videos	very attractive	3	100%	
			attractive			
			not attractive			
			not attractive at all			
	d	Informativeness of the feedbacks	very informative	1	83%	
			informative	2		
			not informative			
			not informative at all			
5	**Time Management**					
	a	Appropriateness of the time allocation for 1 exercise, 1 test,	Yes	2	-	-

		and extra practice in 45 minutes	No	1		
6	**Others**					
	a	Usefulness of the software	very useful	1	83%	**93%**
			useful	2		
			not useful			
			not useful at all			
	b	Predilection of learning by using the software	very much	2	92%	
			much	1		
			little			
			very little			
	c	Autonomy of learning by using the software	very autonomous	3	100%	
			autonomous			
			not autonomous			
			not autonomous at all			
	d	Motivation to learn by using the software	very motivated	2	92%	
			motivated	1		

			not motivated			
			not motivated at all			
	e	Eagerness to learn by using the software again	yes	3	100%	
			no			

"f" stands for frequency.

"Sub-variables" represents the percentage of each variable which calculated according to the formula of "Level of Effectiveness, Attractiveness, Usability, Accessibility, Fitness, Suitability, Appropriateness, Usefulness, Motivation and Independence Analysis".

"Total Average" is the total average of each variable.

Data Analysis

From the findings as shown in Table 4.6, there are several conclusions to draw:

1. **Analysis on the Effect of the Audio-visual and Software Design**
   a. It was found that the three respondents empirically acknowledged that the developed learning software was, in general, exceptionally attractive. Thus, it can be concluded that the software was totally effective to attract learners" attention to learn more and more. This irrefutable conclusion was confirmed with the attractiveness level of 100% on this sub-variable.

b. Among the three respondents, two said the design of the software was attractive and the other one stated that it was very attractive. From the respondents" answers, it can be said that the design of the software was so appropriate for learners that they could be more motivated. 83% on the level of attractiveness analysis really proved that the design of the software was indeed attractive.
c. To help learners visualize what they hear, pictures were accordingly added. Concerning the pictures existing in the software, it is very significant to know the quality of the pictures based on learners" point of view. One respondent thought the quality of the pictures existing in the software was good and two respondents said it was very good. This sub-variable got 92% on the level of quality analysis and thus confirmed that the pictures in the developed software were mostly qualified.
d. Not only was the quality of pictures needed to be measured but also the quality of the songs and videos in the developed learning software. One of the three respondents in this individual evaluation considered that the songs and videos were commonly good. In addition, two respondents affirmed that the quality of the songs and videos were very good. As a conclusion, the quality of the songs and videos existing in the developed learning software were practically very satisfying. The conclusion made was based on the quality level of 92%.
e. All respondents in this individual try-out agreed that the sounds/recordings in the software were clear enough. This sub-variable got 75% on the level of clarity analysis.
f. Considering the clarity of texts in software is extremely fundamental to help and support the learning processes, the

researcher evaluated the clarity of the texts in the developed software through the respondents. As a result, three respondents believed that the texts presented in the software were all very clear and readable. Consequently, this sub-variable gained 100% on the level of clarity analysis.

On the whole, the effect of the audio-visual and software design of the developed learning software reached 90% in Total Average. This means that the effect of the audio-visual and software design of the developed learning software was very good.

2. Usability and Accessibility

a. It was found that two of the three respondents claimed that the organization of the navigation buttons used in the developed learning software was well-structured and the other respondent surely confirmed that it was very well-structured. This sub-variable got 83% on the level of usability analysis. For that reason, it can be concluded that all respondents generally acknowledged that the navigation buttons used in the developed software were primarily very well-structured.

b. Concerning the accessibility of the navigation buttons presented in the developed learning software, two respondents said that the software was easy to navigate. The other respondent stated that it was very easy to navigate. This was confirmed with the accessibility level of 83% on this sub-variable.

c. It is necessary to know what real learners think towards the usability and clarity of the navigation buttons used in the

developed software since the navigation buttons take a big role in the learning processes. Relating to the usability and clarity of the navigation buttons used in the developed software, one of the three respondents claimed that the navigation buttons in the software were able to represent their functions clearly. Moreover, the rest of the respondents firmly agreed that the navigation buttons in the developed software represented their functions very obviously. This was confirmed with the usability level of 92% on this sub-variable.

d. That the instructions presented in the learning software were altogether very clear was confirmed by the three respondents in this individual try out. This was confirmed with the usability level of 100% on this sub-variable.

e. Concerning the font size used in the developed software, all the respondents affirmed that the font size was very appropriate. This, by all means, verifies that the learners found it easy to read all texts in the learning software. This sub-variable acquired 100% on the level of usability analysis.

f. Regarding the size of the videos presented in the software as an important element, the researcher questioned it to the respondents through the questionnaire. As a result, two respondents believed that the size of the videos in the software was sufficient. Similar to the former respondents, the other respondent confirmed that the size of the videos in the software was extremely appropriate. This sub-variable acquired 83% on the level of usability analysis.

Overall, the usability and accessibility of the developed software got 90% in Total Average which evidently proved that the developed learning software was very easy to use and access.

3. Analysis on the Fitness of the Developed Software with Its Purposes

a. The three respondents affirmed that the level of difficulty of the software was appropriate for the level of the learners. This was verified with the fitness level of 75% on this sub-variable.

b. Two respondents decisively agreed that the medium (computer) was very suitable for delivering the materials. The other respondent confirmed that the medium for delivering the materials was adequately suitable. This sub-variable acquired 92% on the level of fitness analysis.

c. One of the three respondents concluded that the formulation of the instructional objectives was clear. The other two respondents were very sure that the formulation was extremely clear. This means that the learners knew why they learnt using the developed software. This sub-variable acquired 92% on the level of fitness analysis.

In general, the fitness of the developed software with its purposes got 92% in Total Average. Consequently, it can be said that the formulation of the instructional objectives of the software was exceedingly clear. Eventually, the software could successfully reach its purposes.

4. Suitability of Learning Content

a. Whether or not the exercises provided in the developed learning software were attractive was very important to question. As a matter of fact, it was found that one of the respondents claimed that the exercises in the software were very attractive and the two other respondents claimed they were attractive as well. It can consequently be concluded that all the respondents acknowledged that the exercises in the software were mainly so attractive that could attract their attention to learn. This sub-variable finally got 83% on the level of suitability analysis.

b. Regarding the suitability of the content of the software to its audience, two respondents determinedly stated that the content of the developed software was suitable to its audience (third graders of Senior High School). The other respondent confidently admitted that the content of the developed software was very suitable to its audience. This was confirmed with the suitability level of 83% on this sub-variable.

c. All the respondents acknowledged that the songs and videos in the developed learning software were very interesting. This fact precisely encouraged the learners to learn more and more. This sub-variable got 100% on the level of suitability analysis.

d. Considering that feedbacks are one of the most important elements in the developed software, it is essential to know whether or not the feedbacks were informative. The sub-variable related to the informativeness of the feedbacks in the software attained 83% on the level of suitability analysis as two respondents agreed that the feedbacks were informative and the

other respondent stated that the feedbacks were extraordinarily informative.

In general, the developed software acquired Total Average of 87% for the suitability of learning content. Accordingly, it can be concluded that the learning content of the developed software was remarkably suitable for the target learners.

5. Time Management

a. Referring to the time management in the try-out, two respondents stated that the time allocation of 45 minutes for one exercise, one test, and finally extra practice was appropriate. On the contrary, the last respondent differently felt that the time allocation was inappropriate because it was too short.

The researcher really expected to provide more time since the developed software was for individual learning. However, the school could only spare 45 minutes for the try-out.

6. Others

a. From the data taken, there were two respondents who thought that the developed learning software was useful. The other respondent moreover thought the software was very useful. By all means, all the respondents generally believed the software was very useful for them. This was verified by the usefulness level of 83% on this sub-variable.

b. Two respondents affirmed that they had a very great predilection for learning by using the developed software. The other respondent also stated that he/she was fond of learning by using

the software. This sub-variable got 92% on the level of attractiveness analysis.

c. Since the developed software supports individual learning, it is fundamental to know whether or not learners can learn autonomously by using the software. According to the data acquired, the three respondents extremely believed that they could learn autonomously by using the software. Consequently, this sub-variable obtained 100% on the level of independence analysis.

d. One of the three respondents said that he/she was really motivated to learn more by using the developed learning software. In addition, the other two respondents were firmly sure that the software was very motivating. This was confirmed by the motivation level of 92% on this sub-variable.

e. All the respondents in this individual try-out were, without doubt, very eager to learn by using the developed learning software again someday. It was verified with the respondents″ answer.

On the whole, this variable had attained satisfying results. The Total Average of this variable was 93%. Thus, it can be said that the developed software was useful and motivating. Furthermore, the software could also enhance individual learning.

According to the result of the individual try-out, all the variables of this developed software got the Total Average of above the threshold (70) and therefore they were considered good and thus no revision was needed.

As previously explained, there were several comments and suggestions (inputs) which were considered as the qualitative data and used

for the basis of revising the developed software. The positive inputs and the shortcomings and suggestions from the respondents of the individual try out are presented in Table 4.7 and Table 4.8.

Table 4.7. The Positive Inputs from the Three Respondents of Individual Try-out

No	Variables	Positive Inputs
1	The **e**ffect of the audio-visual and software design	The quality of the sounds and recordings were basically good. The design of the software was eye-catching. The songs and videos were very motivating.
2	The usability and accessibility of the developed software	The organization of the navigation buttons was virtually great. The software was easy to navigate.
3	The fitness of the developed software with its purposes	The level of difficulty is appropriate for the level of the learners. The developed software could improve the learners" listening ability.
4	The suitability of learning content	The videos were attractive and educating. The feedbacks were very helpful. The learning content helped the students understand the materials.
5	Time management	None

Table 4.8. The Shortcomings and Suggestions from the Three Respondents of Individual Try-out

No	Variables	Shortcomings and Suggestions based on the Three Respondents
1	The **e**ffect of the audio-visual and software design	None
2	The usability and accessibility of the developed software	It was advisable to enlarge the size of the *Home button* in the developed software. There were several buttons that actually functioned nothing but were designed to be functional.
3	The fitness of the developed software with its purposes	None
4	The suitability of learning content	It was advisable to add some more songs for learning in the software. It was suggested to provide more popular songs for learning.
5	Time management	The time allocation of 45 minutes was not enough. Then it could possibly fail the learners to repeat listening to the recordings in the software. Therefore, it was recommended to give more time.

In accordance with the gained data shown in Table 4.7 and Table 4.8, the software had already been evaluated very critically and had consequently gained positive inputs along with its shortcomings. The comments and suggestions acquired from the respondents were considered

as the basis of product revision. After being critically revised by the researcher, the developed software was prepared to be evaluated through the field try-out.

4.2.2.1 Revision of the Product (2nd Revision)

The data of the second product revision are presented in Table 4.9.

Table 4.9. The Problems to Revise and the Second Revision

No	Variables	Problems to Revise	Revision II
1	The **e**ffect of the audio-visual and software design	None	None
2	The usability and accessibility of the developed software	It was advisable to enlarge the size of the *Home button* in the developed software.	Due to the fact that the *Home button* was, in fact, quite clear and easy to navigate, the researcher decided not to enlarge it.
		There were several buttons that actually functioned nothing but were designed to be functional such as:	In this case, the researcher changed the design of some non-functional buttons so that learners can know which buttons function and do not. The changes are shown below:

		1.  2. 	1.  2. 
3	The fitness of the developed software with its purposes	None	None
4	The suitability of learning content	It was advisable to add some more songs for learning in the software.	There were previously five (5) songs only. The researcher added five more songs as demanded by the respondents.
		It was suggested to provide more popular songs for learning.	For the additional five songs, the researcher put newly- published songs with the intention of motivating learners to learn more.
5	Time management	The time allocation of 45 minutes was not enough. Then it could possibly fail the learners to repeat listening to the recordings in the software. Therefore, it is recommended to make the time allocation longer.	The researcher truly demanded to prolong the time allocation since the developed software was for individual learning. However, the school could only provide 45 minutes for the try out.

4.2.3 Field Try-out

As clearly explained earlier, the software needed to be tried out for several times to get the best result of the product. Having been evaluated through the pre-evaluation and the individual try-out, the product was afterwards revised very meticulously. The last try-out of the revised product, the field try-out, was conducted on March 5th, 2010. The researcher had sixty (60) third graders to try the product out. The field try-out was done in the Digital Language Laboratory with the presence of the researcher who was observing the try-out. The result of this ultimate try-out is presented in Table 4.10.

Table 4.10. The Result of Field Try-out

No.	Variables			Respondents (f)	Percentage	
					Sub-Variables	Total Average
1	**The Effect of the Audio-Visual and Software Design**					
	a	Attractiveness of the whole software	very attractive	38	91%	**86%**
			attractive	22		
			not attractive			
			not attractive at all			
	b	Attractiveness of the software design	very attractive	27	85%	
			attractive	30		

			not attractive	3		
			not attractive at all			
	c	Quality of the pictures	very good	25	84%	
			good	32		
			bad	3		
			very bad			
	d	Quality of the songs and the videos	very good	26	84%	
			good	29		
			bad	5		
			very bad			
	e	Clarity of the sounds/recordings	very clear	19	81%	
			clear	36		
			not clear	5		
			not clear at all			
	f	Clarity of the texts presented in the software	very clear	42	93%	
			clear	18		

			not clear			
			not clear at all			
2	**Usability and Accessibility**					
	a	Organization of the navigation buttons	very well-structured	28	85%	**86%**
			well-structured	29		
			not well-structured	3		
			not well-structured at all			
	b	Accessibility of the navigation buttons of the software	very easy	31	87%	
			easy	26		
			not easy	3		
			not easy at all			
	c	Usability and clarity of the navigation buttons (whether the buttons represent their functions or not)	very clear	29	87%	
			clear	31		
			not clear			
			not clear at all			
	d	Clarity of the instructions in the software	very clear	32	87%	

			clear	25		
			not clear	3		
			not clear at all			
	e	Appropriateness of the font size in the software	very appropriate	36	90%	
			appropriate	23		
			not appropriate	1		
			not appropriate at all			
	f	Appropriateness of the size of the videos in the software	very appropriate	18	80%	
			appropriate	36		
			not appropriate	6		
			not appropriate at all			
3	**Fitness of the Developed Software with Its Purposes**					
	a	Appropriateness of the level of difficulty of the software for the level of learners	very appropriate	22	83%	**85%**
			appropriate	35		
			not appropriate	2		
			not appropriate at	1		

			all			
	b	Suitability of the medium (computer) that is used to present the materials	very suitable	30	88%	
			suitable	30		
			not suitable			
			not suitable at all			
	c	Clarity of the formulation of the instructional objectives	very clear	22	83%	
			clear	36		
			not clear	1		
			not clear at all	1		
4	**Suitability of Learning Content**					
	a	Attractiveness of the exercises in the software	very attractive	38	91%	**90%**
			attractive	22		
			not attractive			
			not attractive at all			
	b	Suitability of the content to its audience	very suitable	33	88%	
			suitable	26		

			not suitable	1		
			not suitable at all			
	c	Attractiveness of the songs and videos	very attractive	41	92%	
			attractive	19		
			not attractive			
			not attractive at all			
	d	Informativeness of the feedbacks	very informative	35	88%	
			informative	22		
			not informative	3		
			not informative at all			
5	**Time Management**					
	a	Appropriateness of the time allocation for 1 exercise, 1 test, and extra practice in 45 minutes	Yes	27	-	-
			No	33		
6	**Others**					
	a	Usefulness of the software	very useful	37	90%	**90%**
			useful	22		

			not useful	1		
			not useful at all			
	b	Predilection of learning by using the software	very much	42	92%	
			much	16		
			little	2		
			very little			
	c	Autonomy of learning by using the software	very autonomous	34	88%	
			autonomous	24		
			not autonomous	1		
			not autonomous at all	1		
	d	Motivation to learn by using the software	very motivated	39	90%	
			motivated	18		
			not motivated	3		
			not motivated at all			
	e	Eagerness to learn by using the software again	yes	60	100%	
			no			

"f" stands for frequency.

"Sub-variables" represents the percentage of each variable which calculated according to the formula of "Level of Effectiveness, Attractiveness, Usability, Accessibility, Fitness, Suitability, Appropriateness, Usefulness, Motivation and Independence Analysis".

"Total Average" is the total average of each variable.

Data Analysis

From the findings as shown in Table 4.10, there are several conclusions to draw:

1. **Analysis on the Effect of the Audio-visual and Software Design**
   a. Twenty-two respondents (36.7%) confirmed that developed learning software was attractive and thirty-eight respondents (63.3%) believed it was very attractive. Thus, it can be concluded that all of the learners (100%) agreed that the developed learning software was attractive. The attractiveness level of the whole software was 91%.
   b. Among the sixty respondents, three learners (5%) affirmed that the design of the software was not attractive. However, there were thirty respondents (50%) who said that the design of the software was attractive and the other one stated that it was very attractive. Additionally, the rest twenty-seven respondents (45%) believed that the software was very attractive. As a conclusion, most of them (95%) stated that the design of the software was generally attractive. This sub-variable attained 85% on the level

of attractiveness analysis and therefore really proved that the design of the software was certainly attractive.

c. As said before, to help learners visualize what they hear, pictures were accordingly added. Concerning the pictures existing in the software, it is very significant to know the quality of the pictures based on learners" point of view. In this field try-out, three learners (5%) confirmed that the quality of the pictures existing in the software was bad. On the other hand, thirty-two learners (53.3%) agreed that the pictures were good. Moreover, and twenty-five learners (41.7%) respondents said it was very good. In brief, most of the respondents (95%) stated that the quality of the pictures existing in the software was good. This sub-variable obtained 84% on the level of quality analysis. Therefore, it can be concluded that the pictures in the developed software were mostly good.

d. The quality of the songs and videos in the developed learning software also needed to be evaluated. As a result of the last evaluation, five learners (8.3%) felt that the quality of the songs and videos were bad. In contrast, there were twenty-nine respondents (48.3%) who believed that the quality of the songs and videos in the software was good. Furthermore, twenty-six learners (43.4%) verified that the quality of the songs and videos was extremely perfect. Thus, a large amount of the learners (91.7%) stated that the songs and videos were basically good. The level of quality of this sub-variable was 84%.

e. Five respondents (8.3%) in this field try-out considered the sounds in the developed software were not clear. However, thirty-six respondents (60%) believed the sounds were clear. The

rest of the respondents, nineteen learners (31.7%), agreed that the sounds in the software were very clear. Accordingly, most of the respondents (91.7%) confirmed that the sounds in the software were presented clearly. In line with that, the sub-variable of the quality of the sounds in the software gained 81% on the level of clarity analysis.

f. Considering the clarity of texts in software is extremely fundamental to help and support the learning processes, the researcher evaluated the clarity of the texts in the developed software through the respondents. As a result of this field try-out, eighteen respondents (30%) believed that the texts presented in the software were clear and readable. Moreover, forty-two respondents (70%) did confirm that the texts presented in the software were extremely clear. Thus, all of the respondents (100%) confidently agreed that the texts in the software were very clear. Consequently, the sub-variable of the clarity of the texts in the developed software gained 93% on the level of clarity analysis.

All in all, in this field try-out, the effect of the audio-visual and software design of the developed learning software reached 86% in Total Average. This means that the effect of the audio-visual and software design of the developed learning software was very good.

2. Usability and Accessibility

a. Concerning the sub-variable of the organization of the navigation buttons in the developed software, twenty-nine respondents

(48.3%) stated that it was well-structured. Furthermore, twenty-eight respondents (46.7%) strongly agreed that the navigation buttons were very well-organized. On the contrary, for 5% of the respondents, the navigation buttons were not well-organized. Consequently, a good number of the respondents (95%) believed that the navigation buttons were virtually well-organized. This sub-variable got 85% on the level of usability analysis.

b. Relating to the accessibility of the navigation buttons presented in the developed learning software, it was found in the field try-out that most of the learners affirmed that the learning software was easy to navigate. As a matter of fact, thirty-one respondents (51.7%) thoughtfully considered that the software was very easy to navigate. Additionally, twenty-six respondents (43.3%) accurately verified that the software was easy to navigate as well. On the other hand, there were only three learners (5%) declared that it was not easy to navigate. All in all, the accessibility level of this sub-variable reached 87% in this field try-out.

c. Since the navigation buttons take a great role in the accessibility of the developed software, it is crucial to know what real learners think towards the usability and clarity of the navigation buttons used in the developed software. In line with that, thirty-one of the sixty respondents (51.7%) conclusively claimed that the navigation buttons in the software were able to represent their functions clearly. Furthermore, the rest twenty-nine respondents (48.3%) surely believed that the navigation buttons in the developed learning software were extremely able to represent their functions very clearly. This was verified with the usability level of 87% on this sub-variable.

d. In view of the fact that instructions presented in learning software are very significant to help guide learners in learning individually, in the field try-out, it is essential to get the respondents" viewpoint about the instructions presented in the developed software. As a result, twenty-five learners (41.7%) thought that the instructions in the developed software were clear. In addition, thirty-two learners (53.3%) strongly agreed that the software had already provided instructions very clearly that enabled the learners" individual learning. In contradiction, there were three learners (5%) who stated that the instructions in the software were not clear enough. Overall, it can be said that almost all respondents agreed that the instructions in the developed learning software were clear. This then was confirmed with the usability level of 87% on this sub-variable.

e. Regarding the font size used in the developed software, twenty-three respondents (38.3%) affirmed that the font size used in the software was appropriate. Furthermore, thirty-six learners (60%) confidently stated that the font size used in the developed learning software was very appropriate. However, it was also found that one of the respondents (1.7%) differently had an idea that the font size used in the software was not appropriate. From the data taken, most of the respondents (98.3%), precisely had the same opinion that the font size in the software was appropriate. This sub-variable acquired 90% on the level of usability analysis.

f. Regarding the size of the videos presented in the software as an important element, the researcher questioned it to the respondents through the questionnaire in the field try-out. As a result, thirty-six students (60%) firmly believed that the size of the videos in

the software was appropriate. Like the former respondents, there were eighteen respondents (30%) who confirmed that the size of the videos in the software was extremely appropriate. Nevertheless, six respondents (10%) stated that the size of the videos was not appropriate. To make a conclusion, nearly all of the sixty respondents (90%) agreed that the size of the videos in the developed software was appropriate. This sub-variable acquired 80% on the level of usability analysis.

All in all, the usability and accessibility of the developed software obtained 86% in Total Average which evidently proved that the developed learning software was very easy to use and access.

3. Analysis on the Fitness of the Developed Software with Its Purposes

a. Since students" ability varies, in the field try-out, the researcher questioned the sixty respondents about the appropriateness of the level of difficulty of the software for them through the questionnaire. In line with that, it was found that merely three respondents (5%) disagreed that the level of difficulty of the software was appropriate for the level of the learners. On the other hand, thirty-five respondents (58.3%) affirmed that the level of difficulty of the software was appropriate for their level. Furthermore, twenty-two respondents (36.7%) strongly agreed that the level of difficulty of the software was very appropriate for their level. Overall, 95% of the respondents positively confirmed that the level of difficulty of the software satisfied the

level of the learners. This sub-variable obtained 83% on the level of fitness analysis. Based on that percentage, it could be concluded that the level of difficulty of the software was generally appropriate for the level of the learners.

b. Half of the sixty learners (50%), in this field try-out, positively agreed that the medium (computer) was exceedingly suitable for delivering the materials. The other fifty learners (50%) also believed that the medium (computer) was suitable for delivering the materials. According to those facts, the researcher can definitely conclude that the medium (computer) was basically suitable for carrying the materials. This sub-variable acquired 88% on the level of fitness analysis.

c. One of the sixty respondents (1.7%) cited that the formulation of the instructional objectives was not clear at all. Similar to that student, there was also one other student (1.7%) who stated that the formulation was not clear enough. However, thirty-six students (60%) differently confirmed that the formulation of the instructional objectives was clear. In addition, twenty-two students (36.6%) verified that the formulation was very clear. In line with that the data that 96.6% of the respondents gave a positive input to the formulation of the instructional objectives, the researcher assumed that the formulation of the instructional objectives in the developed software was actually clear. This was verified by the fitness level of 83% on this sub-variable.

Overall, the fitness of the developed software with its purposes got 85% in Total Average which means that developed learning software had a very clear formulation of instructional objectives

that enables learners understand/know the objectives of their learning.

4. Suitability of Learning Content

a. Twenty-two of the sixty respondents (36.7%) in this field try-out claimed that the exercises in the software were attractive. It also appeared that the rest thirty-eight respondents (63.3%) confirmed that the exercises presented in the software were extremely attractive. In line with the data, it can therefore be concluded that all the respondents (100%) were attracted to the exercises in the software. This sub-variable lastly got 91% on the level of suitability analysis.

b. Regarding the suitability of the content of the software to its audience, thirty-three learners (55%) stated that the content of the developed software was very suitable to its audience (third graders of Senior High School). Additionally, twenty-six learners (43.3%) confirmed that the content of the software was also suitable to the third-grade students of Senior High School. In contrast, however, there was one learner (1.7%) who considered that the content of the software was not suitable to the audience. Based on the result on this sub-variable, it can be said that almost all of the learners (98.3%) agreed that the content of the software was appropriate for its audience which were third graders of Senior High School students. This was also verified with the suitability level of 91% on this sub-variable.

c. Relating to the attractiveness of the songs and videos presented in the software as learning resources, forty-one learners (68%), in this field try-out, were firmly sure that the songs and videos in

the developed software were extremely attractive. In addition, nineteen learners (32%) confidently acknowledged that the songs and videos in the developed learning software were interesting as well. In other words, it can be said that all the respondents (100%) believed that the songs and videos in the developed software were principally attractive. This conclusion was verified with the suitability level of 92% on this sub-variable.

d. While doing the exercises in the developed software, learners would get feedbacks. In this field try-out, thirty-five learners (58.3%) felt that the feedbacks given by the software were very informative and exactly helpful. Twenty-two learners (36.7%) had the same opinion by stating that the feedbacks were informative. Even though there was three respondents (5%) felt that the feedbacks were not informative, most of the learners (95%) confirmed that the feedbacks in the developed learning software were consistently informative. The sub-variable related to the informativeness of the feedbacks in the software attained 88% on the level of suitability analysis.

Referring to the results appearing in the variable of the suitability of learning content in the software, the developed software was now fully ready to be used as a means of improving listening skill. This variable acquired Total Average of 90%. Accordingly, it can be concluded that the learning content of the developed software was astonishingly suitable for the target learners.

5. Time Management

a. Concerning the suggested time allocation 45 minutes for one exercise, one test, and finally extra practice, twenty-seven learners (45%) felt that the time given was appropriate. On the other side, thirty-three learners (55%) stated that the time allocation of 45 minutes was not appropriate. From the inputs gained, it was because the time allocation was too short. In this case, the learners expected more time. However, as explained before, the school where the researcher conducted the try-out did not provide more time for the try-out since the students were going to face a series of tests.

The researcher did expect to provide more time since the developed software was for individual learning. However, the school could only spare 45 minutes for the try-out.

6. Others

a. Whether the developed software was useful or not for the learners was also questioned in this field-try-out. From the data obtained, thirty-seven respondents (61.6%) believed that the software was particularly useful for improving their listening skill. As well as those respondents, the other twenty-two learners (36.7%) also concluded that the software was useful for them. However, one learner (1.7%) differently thought that the developed software was useless for him/her. Overall, most of the respondents (98.3%) surely believed that the developed software was very useful. This sub-variable acquired 90% on the usefulness level.

b. In the field try-out, only two respondents (3.3%) confirmed that they did not really like learning using the developed software. On the other hand, there were sixteen respondents (26.7%) who showed their interest in learning using the developed software. Furthermore, forty-two of the sixty respondents (70%) in the field try-out confirmed that they were very fond of using the developed software to improve their listening skill. According to the data acquired, in other words, it can be said that the software was so attractive and effective that nearly all the respondents (96.7%) showed their predilection to improve their listening skill by using the developed software. The sub-variable that determined whether the respondents enjoyed and liked using the software got 92% on the level of attractiveness analysis.

c. As the developed software is purposely for individual learning, it is essential to know whether or not learners can learn autonomously by using the software. In the field try-out, the findings towards this sub-variable varied. There was one learner (1.7%) who stated that he/she could not, by any means, learn by using the software independently. Having the similar idea, one more learner (1.7%) stated that he/she still needed others/teachers while learning using the software. That explicitly means the learner could not independently learn by using the developed software. Despite the existing findings that were negative, the developed software could still be considered effective since the rest fifty-eight learners agreed that they could learn by using the software without any help from others. In details, twenty-four learners (40%) truly stated that they could learn independently by using the developed software. Moreover, thirty-four learners

(56.6%) strongly agreed that they could precisely learn by using the software without any teachers or others. Based on the findings, virtually all the respondents (96.6%) believed that they could learn autonomously by using the software. Therefore, this sub-variable obtained 88% on the level of independence analysis.

d. Referring to learners" motivation to learn by using the developed software, thirty-nine respondents (65%), in the field try-out, confirmed that they were incredibly motivated to learn more by using the developed learning software. In addition, as well as those highly motivated learners, eighteen respondents (30%) also stated that the developed software was motivating. However, a different opinion also came out. Three learners (5%) stated that they were not motivated to learn by using the developed software. According to the findings, it was found that most of the learners (95%) admitted that they were highly motivated by the learning software. This conclusion was also confirmed by the motivation level of 90% on this sub-variable.

e. Relating to the learners" eagerness to learn by using the developed software again, all the sixty respondents in this field try-out were, with no doubt, very enthusiastic to learn by using the developed learning software again someday. From the findings, the researcher assumed that the software was extremely attractive and motivating that made learners eager to try it again.

Taken as a whole, this variable had attained Total Average of 90%. As a conclusion, the developed software was in fact helpful and motivating. Accordingly, it could solve the problems stated in this developmental study.

Based on the result of the field try-out, all the variables of this developed software got the Total Average of above the threshold (70) and therefore they were considered good and thus no revision was needed.

As mentioned before, not only were the quantitative data but also qualitative ones. Comments and suggestions (inputs) acquired in the field try-out were considered as the qualitative data that were then to be used for the basis of developed software final revision. The positive inputs and the shortcomings and suggestions from the sixty respondents in the field try-out are presented in Table 4.11 and Table 4.12.

Table 4.11. The Positive Inputs from the Sixty Respondents of Field Try-out

No	Variables	Positive Inputs
1	The **e**ffect of the audio-visual and software design	Overall, all aspects related to the effect of the audio-visual and software design were outstanding. The design of the software was attention-grabbing.
2	The usability and accessibility of the developed software	The navigation buttons were very well-structured. The software was practically easy to navigate.
3	The fitness of the developed software with its purposes	The level of difficulty is appropriate for the level of the learners. The developed software could clearly improve the learners‟ listening ability.

4	The suitability of learning content	The videos helped understand daily expressions of English. The feedbacks were extremely helpful. The learning content helped the students understand the materials.
5	Time management	None

Table 4.12. The Shortcomings and Suggestions from the Sixty Respondents of Field Try-out

No	Variables	Shortcomings and Suggestions based on the Sixty Respondents
1	The **e**ffect of the audio-visual and software design	None
2	The usability and accessibility of the developed software	It was advisable to enlarge the size of the videos in the software.
3	The fitness of the developed software with its purposes	None
4	The suitability of learning content	Ten different songs were not enough for the learners. Thus, it was recommended to add some more songs in the software.

5	Time management	The time allocation of 45 minutes was not enough. Then it could possibly fail the learners to repeat listening to the recordings in the software. Therefore, it was recommended to provide some more time.

In line with the acquired data shown in Table 4.11 and Table 4.12, the software had truly been evaluated very critically and had consequently gained positive inputs along with its shortcomings. The comments and suggestions acquired from the respondents in the field try-out were considered as the foundation of final revision of the product. After being critically revised by the researcher, the developed software was now completely ready to be used as a means of improving listening skill. The developer did hope there would not be any revision in the future.

4.2.3.1 Revision of the Product (3rd Revision)

The data of the second product revision are presented in Table 4.13.

Table 4.13. The Problems to Revise and the Third Revision

No	Variables	Problems to Revise	Revision III
1	The **e**ffect of the audio-visual and software design	None	None

2	The usability and accessibility of the developed software	It was advisable to enlarge the size of the videos in the software.	Since the quality of the videos would have been decreasing if the size of the videos had been enlarged, the developer decided not to enlarge them. In this case, the videos were basically large enough.
3	The fitness of the developed software with its purposes	None	None
4	The suitability of learning content	Ten different songs were not enough for the learners. Thus, it was recommended to add some more songs in the software.	As expected by the learners, the developer added ten more new songs in the developed software. Accordingly, there were altogether twenty songs in the software.
5	Time management	The time allocation of 45 minutes was not enough. Then it could possibly fail the learners to repeat listening to the recordings in the software. Therefore, it was recommended to provide some more time.	As explained before, the school could only provide 45 minutes for the try-out since the students were soon to face a series of tests. However, the software was for individual learning. Thus, unlimited time is highly recommended.

4.3 Summary of the Process of the Product Development and Conclusion of the Result of the Product Development

4.3.1 Summary of the Process of the Product Development

The process of the product development was carried out in several steps, and it was also evaluated by a subject specialist and an instructional technologist. Afterwards, it was tested through a series of try-outs to produce a good product. This developed product had been solely revised according to the comments and suggestions from the experts and the subjects of the try-outs. The results of every try-out were used as the foundation of product revision. The process of the software development is summarized in Table 4.14.

Table 4.14. Data of Process and Results of the Product Development

No	Steps of Product Development	Schedule of the development try-outs			Date of Revision
		Date	Number of Subjects	Difficulties	
1	Needs Analysis	December 12th, 2009	1 English Teacher	None	-
2	Materials Development	December 13th-20th, 2009	The Developer	None	-
3	Producing the Software	December 21st, 2009-January 30th, 2010	The Developer	None	-

4	First Product Evaluation by the Subject Specialist and the Instructional Technologist	February 15th-16th, 2010	1 English Teacher and 1 Instructional Technologist	None	February 17th-21st, 2010
5	Individual Try-out	February 23rd, 2010	3 Learners	None	February 24th-30th, 2010
6	Field Try-out	March 5th, 2010	60 Learners	None	March 6th-13th, 2010

4.3.2 Conclusion of Product Development Result

This learning software was completely developed based on the Needs Analysis conducted at the beginning of the development. Therefore, the developed software truly needed to be developed for improving the listening skill of the third-grade students of Dharma Mulya Christian Senior High School Surabaya. After being evaluated through a series of try-outs and improved through several revisions, it can consequently be considered that this developed software was a more effective, efficient and attractive learning media for learners especially third-grade students of Senior High School. This conclusion was confirmed with the results of the field try-out conducted by the learners as the subjects of the try-out.

According to Table 4.10, it could be seen that the learners gave good and very good scores (category 3 and 4) to all the variables of the developed software. Not only was the final conclusion drawn from the result of the

field try-out, but it was also concluded based on the positive comments from the experts as well as the learners.

To conclude, the developed software is now precisely appropriate, helpful and ready to use for improving the listening skill related to UNAS (*Ujian Nasional*) of third-grade students of Senior High School especially Dharma Mulya Christian Senior High School Surabaya. In addition, it can also be used as an alternative learning resource of English Listening Comprehension.

CHAPTER V
DISCUSSION AND SUGGESTIONS

CHAPTER V

DISCUSSION AND SUGGESTIONS

This chapter presents the discussion of the revised product and the suggestions on utilizing and disseminating the developed product as well as developing further product.

5.1 Discussion on the Revised Product

According to the evaluations done to the developed learning software, it could be concluded that this software could be applied and used as a supplementary material for the third graders of Senior High School. Since the product developed in this development was the prototype, it could also be concluded that this prototype could be further developed.

Besides using this computer-based learning material as a supplementary material, the users could also use this software to enhance their English ability and to have self-learning. The final product of this study was in the form of CD-ROM which had several components as follows:

1. **Attention-gaining Materials**

   To attract learners' attention and arouse untimely motivation so that they are motivated to learn in a positive manner, pictures, animations and sounds are utilized. The final product of this study is completed with pictures, animations and sounds in almost every part. On the frame where learners are firstly given options of what exercises or tests they expect, there is a picture of somebody listening to an audio which is to tell learners that they are going to do so. Besides, on that frame, there are several instrumentals which they can choose.

Furthermore, at the end of each exercise or test, learners are motivated with an animation and a recording which reminds them that they have finished the exercise or the test. To attract learners' attention more, the developer also added some interesting pictures in the 'view script' option. The pictures are precisely related to the topic discussed.

2. Learning Objectives

The purpose of informing the instructional objectives to learners is to inform what should be achieved by them at the end of the learning. Informing the instructional objectives is important to build expectations in the learners about everything that should be mastered after they learn. Another benefit is that informing instructional objectives can make learners focus on all of their activities on the learning objectives they want to achieve (Degeng, 1988). In the product of this study, every exercise or test is supported with instructional objectives of the learning. The instructional objectives are presented in writing and orally.

3. Content

The content of this developed software is organized into one language skill: Listening. The clarity of the explanation and the attractiveness of the content in the language skill, in this developed software, are supported by illustrations in the form of pictures that are expected to support the learners in comprehending the materials.

4. Exercises

As stated by Dick and Carey (1985), learning process will be successful if it is supported with adequate exercises. The exercises

given in this developed software are aimed at helping the students to improve their listening skill and also know how well the determined learning objectives have been achieved. Referring to the level difficulty, the exercises provided in this developed product are arranged randomly. By all means, the exercises are accompanied with feedbacks. There are five exercises altogether in the developed software.

5. Tests

According to Dick and Carey (1985), test is particularly needed to assess learners' competencies that they have learnt. In this developed software, after doing the exercises which give immediate feedbacks, students are expected to do the tests in order to measure their listening ability. In the tests, learners will get their score after finishing the tests. In this case, if the learners intend to check whether or not their answers in the tests correct, they can check the answers by referring to the exercises. Since the software enables learners to check their answers of the tests, the problems presented in the tests and exercises are basically the same. For example, the problems in exercise I are the same as the problems in test I. Unlike tests which give feedback at the end, exercises give immediate feedback as learners give their answer.

6. Feedbacks

Feedback is a key element in a sequence of instruction. It is the means by which a learner is able to judge his or her own performance. Without a feedback, a learner is left to perform with no sense of direction or measure of correctness (Cates: 1988). This

statement shows that feedback is one of the important components in computer-based learning material. The feedbacks provided in this developed software are to inform the learners whether their answers are correct or wrong. In his case, the feedbacks can also be in the form of score.

7. Other Components

The result of the data analysis presented in Table 4.10 shows that this software was accepted by learners and that the software could give advantages over other learning media particularly books. Additionally, the existence of this developed software is believed to increase the learners' motivation in learning English. Most of the learners also considered that they were able to use this software without any guidance from their teacher. Thus, it can be concluded that the software is easy to navigate and supports individual learning.

The developed software has several strengths that also support the positive conclusion of this developmental study. The strengths are described as follows:

1. This developed software can be used as an alternative media for learning new materials.
2. It can be used as a means to increase the learners' motivation in learning.
3. This developed software can be used to introduce the model of electronic learning using computer to learners.
4. The content covered in this software is based on the listening standard of graduate competency of Dharma Mulya Christian Senior High School Surabaya. Since the standard of graduate competency of

Dharma Mulya Christian Senior High School Surabaya is mostly similar to other High Schools, the software is thus really suitable for all third-grade students of Senior High School.

5. This developed software can be considered good because it has been tested through a series of try-outs by the learners and has been evaluated by the experts.
6. The English teacher of Dharma Mulya Christian Senior High School Surabaya has acknowledged that the students show their great interest in learning by using the developed software and consequently agrees to make use of it.
7. Since the developed software does not need to be installed first in the computer, it can make the operation of this software easier.

The developer did believe that the developed software is still far from the excellence. Consequently, besides presenting the strengths of using the software, the developer presented the shortcomings of the software as well. The shortcomings are presented as follows:

1. Although the developed learning software has been revised for many times and has been approved for its suitability, there might still be several weaknesses that are still unknown. Those unpredicted shortcoming might occur when the developed software is used by other respondents. Therefore, in the further usage, if there are disadvantages or problems occur, it is hoped to be understood.
2. The validity of this developed software was tested only to 60 students, and was evaluated only by one Subject specialist and one Instructional Technologist.

3. The operation of the software requires certain facilities such as computer and money for paying the electricity charge. However, this problem did not occur in Dharma Mulya Christian Senior High School Surabaya since the computers had already been provided.
4. This developed software cannot be used in a classroom in which computers are not available.
5. The learners' computer knowledge becomes one requirement, because the software uses computers as the main device. Nevertheless, it does not need an expert skill to operate the learning software.
6. The test score cannot automatically be saved in a particular computer.
7. The voice used in the developed software is local speakers' voice instead of native ones'.
8. The types of the test items are determined randomly. In this case, there is no specific framework to organize the types of the test items.
9. The feedbacks of the test do not support the indication of which number is correct or incorrect.
10. Since this software is compatible with particular players, it is recommended to install Flash Media Player 8 or later version to run the software.

5.2 Suggestions

According to the process of the development that had been done, the process and result of a series of try-outs, and the conclusion that had been made, it is essential to give the following suggestions:

1. Suggestions for utilizing this product

As an alternative source of learning English, the developed software is very suitable to be used in particular circumstances as mentioned below.

a. Students are to graduate from High School and to sit for *Ujian Nasional* (UNAS).
b. Students face difficulties in improving listening skill.
c. Students face difficulties in learning listening since most of other resources do not give immediate feedbacks.
d. Students expect to measure their listening ability. In this point, the developed software can give students score.
e. Students intend to learn individually. In this case, the software is designed for individual learners.

There are also several things to consider to utilize the developed learning software.

a. In case the developed software is to be used for teaching-learning process in schools, the harware (computer) should first be provided.
b. To make the learning process run well and effectively, learners are advisable to have a skill in operating computer before using the software.

2. Suggestions for Disseminating the Product

The developed software could be spread to a wide range of learners as an alternative learning resource especially for listening skill. Thus, public or private schools can also utilize the existence of this software as long as:

a. The related schools have computer laboratory that could support teaching and learning process via computer.
b. The students of the particular schools intend to learning by using the software and exactly have the skill to operate computer.

To find out whether or not the students are ready to use the software, Needs Analysis is necessarily suggested.

3. Suggestions for Further Product Development

Numerous suggestions recommended for further product development are described below.

a. It is suggested to provide the system in which learners' scores can be saved automatically in computer. Thus, every time learners stop studying and then would like to use the software again, they can know their prior score and continue their further learning.
b. Since native speakers' voice is likely more effective to be used for learning listening, it is recommended to provide native speakers' voice in the further development.
c. It is also suggested to produce content-free software which teachers can change or modify the content of the software if needed.
d. It is recommended to produce CALL software which can automatically save learners' test score.
e. It is also advisable to put the indication of which test item is correct or incorrect.

f. Further product development can be carried out for other English skills and components, such as speaking, reading, writing, vocabulary, grammar, and pronunciation.

g. If the further product development is going to be conducted for another school or institution, it is advisable to have Needs Analysis to both teachers and students in order to know how effectively the developed software satisfy the needs of the school.

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APPENDICES

APPENDIX 1

NEEDS ANALYSIS QUESTIONNAIRE

NEEDS ANALYSIS QUESTIONNAIRE

1. Identity

a. Name :

b. Subject :

c. Education :

d. Address : _____

e. Phone number : _____

2. Computer Assissted Language Learning (CALL)

a	Do you know about CALL before?	YES
		NO
b	Do you ever use a computer as a media for learning?	YES
		NO
c	Are you interested to have your students learn using CALL?	YES
		NO
d	Do you agree to develop CALL software for teaching langu in this school?	YES
		NO
e	What English skills need to be developed using CALL?	LISTENING
		SPEAKING
		READING
		WRITING
f	What language do you expect to be used in the CALL software?	INDONESIAN
		ENGLISH
		BILINGUAL

Why does CALL software need to be developed in this school?

_____

_____

APPENDIX

2

QUESTIONNAIRE OF PRE-EVALUATION BY SUBJECT SPECIALIST AND INSTRUCTIONAL TECHNOLOGIST

QUESTIONNAIRE OF PRE-EVALUATION
BY SUBJECT SPECIALIST AND INSTRUCTIONAL TECHNOLOGIST

Nama : _____

A. Efek dari audio-visual dan desain software

1. Apakah software ini mampu menarik perhatian para siswa?

Sangat mampu			Tidak mampu
4	3	2	1

2. Apakah software ini dapat memotivasi para siswa untuk belajar?

Sangat memotivasi			Tidak memotivasi
4	3	2	1

3. Bagaimana tampilan CD interactive ini?

Sangat menarik			Tidak menarik
4	3	2	1

4. Bagaimana gambar-gambar yang ada?

Sangat bagus			Tidak bagus
4	3	2	1

5. Bagaimana lagu-lagu dan video-video yang ada?

Sangat bagus			Tidak bagus
4	3	2	1

6. Bagaimana kualitas suara yang digunakan?

Sangat jelas			Tidak jelas
4	3	2	1

7. Apakah tampilan software ini sesuai dengan tingkat para pengguna software dan sesuai dengan isinya?

Sangat sesuai			Tidak sesuai
4	3	2	1

8. Apakah pengaturan teks dan gambar yang ditampilkan sesuai dengan tema?

Sangat sesuai			Tidak sesuai
4	3	2	1

Keterangan atau saran (jika ada):

_____

_____

_____

B. Kemudahan penggunaan dan akses

9. Apakah tombol navigasi pada software tersusun dengan baik?

Sangat baik			Tidak baik
4	3	2	1

10. Apakah tombol navigasi pada software dapat digunakan dengan mudah?

Sangat mudah			Tidak mudah
4	3	2	1

11. Apakah tombol navigasi dapat mempresentasikan fungsinya dengan jelas?

Sangat dapat			Tidak dapat
4	3	2	1

12. Apakah instruksi-instruksi yang diberikan jelas?

Sangat jelas			Tidak jelas
4	3	2	1

13. Apakah ukuran teks sudah sesuai?

Sangat sesuai			Tidak sesuai
4	3	2	1

14. Apakah ukuran video sudah sesuai?

Sangat sesuai			Tidak sesuai
4	3	2	1

Keterangan atau saran (jika ada):

_____

_____

_____

C. Kesesuaian software dengan tujuan yang ingin dicapai

15. Apakah tingkat kesulitan software ini sesuai dengan murid yang dituju?

Sangat sesuai			Tidak sesuai
4	3	2	1

16. Apakah materi (termasuk lagu dan video) software ini sesuai untuk disajikan melalui komputer?

Sangat sesuai			Tidak sesuai
4	3	2	1

17. Apakah software ini mencapai sasaran sesuai dengan yang diharapkan?

Sangat sesuai			Tidak sesuai
4	3	2	1

Keterangan atau saran (jika ada):

_____

_____

_____

D. Mengenai isi software

18. Apakah isi software ini sudah terstruktur dengan baik?

Sangat baik			Tidak baik
4	3	2	1

19. Apakah isi software ini sesuai dengan murid yang dituju?

Sangat sesuai			Tidak sesuai
4	3	2	1

20. Apakah jenis-jenis soal dalam software ini sesuai dengan kemampuan siswa?

Sangat sesuai			Tidak sesuai
4	3	2	1

21. Apakah pembahasan yang diberikan bermanfaat?

Sangat bermanfaat			Tidak bermanfaat
4	3	2	1

Keterangan atau saran (jika ada):

_____

_____

_____

E. Pengaturan waktu

22. Apakah waktu yang dialokasikan (1 kali latihan, 1 kali tes,dan mendengar lagu/menonton video dalam 90 menit) sesuai?

Sangat sesuai			Tidak sesuai
4	3	2	1

Jika tidak, tolong sebutkan waktu yang sesuai menurut anda

_____

_____

_____

APPENDIX 3

QUESSIONAIRE OF INDIVIDUAL AND FIELD TRY-OUTS BY THREE LEARNERS AND SIXTY LEARNERS

QUESTIONNAIRE OF INDIVIDUAL AND FIELD TRY-OUTS BY THREE LEARNERS AND SIXTY LEARNERS

Sehubungan dengan tugas skripsi sebagai salah satu persyaratan kelulusan program Strata-1 di Universitas Widya Mandala, saya melaksanakan studi pengembangan dengan judul ”Developing CALL Software for Teaching Listening to Third-Grade Students of Dharma Mulya Christian Senior High School Surabaya.”

Saya berharap agar anda menilai dan memberi tanggapan melalui kuesioner ini sehingga saya dapat melakukan perbaikan untuk meningkatkan kualitas software ini. Penilaian dan tanggapan anda akan sangat membantu dalam penyelesaian studi pengembangan ini. Mohon isi kuesioner ini secara obyektif.

Kuesioner ini terdiri atas 6 bagian. Terdapat empat pilihan yang ditandai dengan nomor 4, 3, 2, dan 1. Nomor (4) menyatakan *sangat baik*, (3) *baik*, (2) *buruk*, (1) *sangat buruk*.

Sangat baik		Sangat buruk	
4	3	2	1

Lingkarilah (O) salah satu dari pilihan-pilihan tersebut sesuai dengan pendapat anda.

Penulis

Peedo Salim

Nama : _____

A. Efek dari audio-visual dan desain software

1. Apakah menurut anda secara keseluruhan software ini menarik?

Sangat menarik			Tidak menarik
4	3	2	1

2. Bagaimana tampilan CD interactive ini?

Sangat menarik			Tidak menarik
4	3	2	1

3. Bagaimana gambar-gambar yang ada?

Sangat bagus			Tidak bagus
4	3	2	1

4. Bagaimana lagu-lagu dan video-video yang ada?

Sangat bagus			Tidak bagus
4	3	2	1

5. Bagaimana kualitas suara yang digunakan?

Sangat jelas			Tidak jelas
4	3	2	1

6. Apakah tulisan yang digunakan dalam software ini jelas?

Sangat jelas			Tidak jelas
4	3	2	1

Keterangan atau saran untuk bagian A (jika ada):

_____

_____

_____

B. Kemudahan penggunaan dan akses

7. Apakah tombol navigasi pada software tersusun dengan baik?

Sangat baik			Tidak baik
4	3	2	1

8. Apakah tombol navigasi pada software dapat digunakan dengan mudah?

Sangat mudah			Tidak mudah
4	3	2	1

9. Apakah tombol navigasi dapat mempresentasikan fungsinya dengan jelas?

Sangat dapat			Tidak dapat
4	3	2	1

10. Apakah instruksi-instruksi yang ada dalam software ini jelas?

Sangat jelas			Tidak jelas
4	3	2	1

11. Apakah ukuran teks sudah sesuai?

Sangat sesuai			Tidak sesuai
4	3	2	1

12. Apakah ukuran video sudah sesuai?

Sangat sesuai			Tidak sesuai
4	3	2	1

Keterangan atau saran untuk bagian B (jika ada):

_____

_____

_____

C. Kesesuaian software dengan tujuan yang ingin dicapai

13. Apakah tingkat kesulitan software ini sesuai dengan kemampuan anda?

Sangat sesuai			Tidak sesuai
4	3	2	1

14. Apakah materi (termasuk lagu dan video) software ini sesuai untuk disajikan melalui komputer?

Sangat sesuai			Tidak sesuai
4	3	2	1

15. Apakah anda tahu tujuan belajar menggunakan CD inetractive ini?

Sangat tahu		Tidak tahu	
4	3	2	1

Keterangan atau saran untuk bagian C (jika ada):

_____

_____

_____

D. Mengenai isi software

16. Apakah isi software ini sudah terstruktur dengan baik?

Sangat baik		Tidak baik	
4	3	2	1

17. Apakah isi software ini sesuai dengan murid yang dituju?

Sangat sesuai		Tidak sesuai	
4	3	2	1

18. Apakah jenis-jenis soal dalam software ini sesuai dengan kemampuan siswa?

Sangat sesuai		Tidak sesuai	
4	3	2	1

19. Apakah pembahasan yang diberikan bermanfaat?

Sangat bermanfaat		Tidak bermanfaat	
4	3	2	1

Keterangan atau saran untuk bagian D (jika ada):

_____

_____

_____

E. Pengaturan waktu

20. Apakah waktu yang dialokasikan (1 kali latihan, 1 kali tes,dan mendengar lagu/menonton video dalam 45 menit) sesuai?

Sangat sesuai			Tidak sesuai
4	3	2	1

Keterangan atau saran untuk bagian F (jika ada):

_____

_____

_____

F. Lain-Lain

21. Apakah CD interactive ini bermanfaat bagi anda?

Sangat bermanfaat			Tidak bermanfaat
4	3	2	1

22. Apakah anda suka belajar meggunakan CD interactive ini?

Sangat suka			Tidak suka
4	3	2	1

23. Bisakah anda belajar menggunakan CD interactive ini tanpa guru?

Sangat bisa			Tidak bisa
4	3	2	1

24. Apakah software ini dapat memotivasi anda dalam belajar?

Sangat memotivasi			Tidak memotivasi
4	3	2	1

25. Apakah anda tertarik untuk mencoba lagi software ini suatu hari nanti?

Ya	Tidak

Keterangan atau saran untuk bagian F (jika ada):

_____

_____

_____

APPENDIX 4

STANDARD OF GRADUATE COMPETENCY

STANDARD OF GRADUATE COMPETENCY

BAHASA INGGRIS SMA/MA (PROGRAM IPA/IPS/BAHASA/KEAGAMAAN)

NO.	STANDAR KOMPETENSI LULUSAN	KEMAMPUAN YANG DIUJI
1	*LISTENING* (Mendengarkan) Memahami makna teks lisan berbentuk teks fungsional pendek, percakapan dan teks monolog sederhana berbentuk naratif (*narrative, recount, news item*) dan deskriptif (*report, descriptive, explanation*) dalam konteks kehidupan sehari-hari.	Menentukan gambaran umum, informasi tertentu dan informasi rinci dari sebuah percakapan
		Memberikan respons yang tepat terhadap percakapan yang berisi ungkapan simpati, rasa suka/tidak suka, undangan, permintaan/ pemberian dan penolakan izin, serta kepuasan/ketidakpuasan yang diperdengarkan
		Menentukan gambar yang tepat sesuai dengan informasi yang ada dalam percakapan
		Menentukan gambar yang sesuai dengan teks monolog yang diperdengarkan
		Menentukan gambaran umum, informasi tertentu, dan informasi rinci dari sebuah teks monolog yang diperdengarkan