

Education Quarterly Reviews

Rahman, A., Wibawa, B., & Sumantri, S. (2022). Developing English for Tourism Learning Model Based on Hypermedia. *Education Quarterly Reviews*, 5(4), 361-381.

ISSN 2621-5799

DOI: 10.31014/aior.1993.05.04.670

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

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Developing English for Tourism Learning Model Based on Hypermedia

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Abstract

The development of the global tourism industry rapidly makes the importance of English communication skill at tourism workplace. State Polytechnic of Lampung has provided English subjects 1, 2, and 3 for students. Unfortunately, the implementation has not given any significant contribution to improve students' English communication skills especially English for tourism. English instructional materials did not fulfill students' needs and stakeholders' needs and standard English competences in tourism workplace. The limitation of learning source become a learning problem for students due to limitation of time to practice English out site of classroom without teacher's guidance. Therefore, it is important to develop a kind of learning model which independence resource that gives a solution to solve the learning problems. Developing model of English learning for tourism based on *hypermedia* was intended to give an alternative independence learning resource to improve competences in English for Tourism based on *hypermedia*. The developing of English learning model base on hypermedia applied research and development (R&D) model used a combination of Dick and Carrey model, Hannafinpeck Model and Allen model. There were three stages in developing model of English for tourism based on *hypermedia*. The first step was conducting needs analysis; identifying instructional goals, conducting instructional analysis, and analyzing learners and contexts. The second step was designing material for learning based on *hypermedia* that was electronic module; writing instructional objectives, developing assessment instruments, and developing learning strategies. The third steps were developing learning material and implementation; developing and selecting instructional materials, implementing and conducting formative evaluation and revision. The results of the formative evaluation from subject matter experts (instructional, media and English for tourism), one to one evaluation, showed that model of English learning for tourism based on *hypermedia* generally was categorized very good (average score: 89,31). One to one evaluation by three learners was also and small group evaluation by eight learners which evaluated on clarity, impact on learners and feasibility showed that design model of English learning for tourism based on hypermedia was categorized very good. Field trial that was conducted to 37 students indicated that model design of English learning based on *hypermedia* for tourism was good and suitable with learning objective, easy to use and understand, demonstrate learning experiences, sufficient for English materials, useful, assessment measure learning outcome, feedback, interesting and engaging learning, motivating, and collaboration between students. The t-test paired sample test showed that design of English for tourism was effective to be used as learning resources with average pretest score was 58,05 and average post test score was 70,92 with gain score was 12,86, while the significant (2-tailed) was $0,000 < 0,05$.

Keywords: Learning Model, English for Tourism, Hypermedia

1. Introduction

English as an international language has been used in official forums such as meetings and meetings between leaders at the United Nations (United Nations) and ASEAN (Asian South East Asian Nations). English is currently used as the official language in 58 sovereign countries (sovereign countries) and 21 non-sovereign countries (non-sovereign countries) with a total of more than 470 million users. ASEAN member countries that use English as their main language (official and second language) are Singapore, Malaysia, and the Philippines, while foreign languages are Indonesia, Vietnam, Brunei, Laos, Myanmar, Thailand, and Cambodia. In Indonesia, English is the most widely used foreign language in international forums organized by the government, private sector, and universities. English is also a foreign language that is mostly mastered by business and industrial players in the tourism sector. Due to the importance of foreign languages in global relations and international tourism, English has been decided as a foreign language subject in Indonesia's academic and vocational higher education curriculum. The global tourism industry is growing rapidly and opening large workplaces in Indonesia. Based on data released by the Lampung provincial tourism office, it wed that from January to June 2019 there have been 100,469 foreign tourists visiting Lampung province and more than four million domestic tourists, its about 4,525,127. The number of tourist have visited to Lampung increasing up to 17.07 percent compared 2017. This caused the tourism industry in Lampung province to grow better. The tourism industry plays an important role in Lampung province because it is one of the mainstays of Lampung's income sector. The development of the tourism industry makes English communication skills increasingly important. Employees working in the tourism sector must be able to communicate with foreigners using a foreign language such as English. Based on the results of interviews with the regional administrators of the Indonesian Guides Association (DPD HPI) Lampung, it shothat the tourism English language skills of the tour guides are still lacking, especially the ability to speak (speaking), read (reading) and write (writing) and the TOEIC score is still below the SKKNI standard for competence. English. Tour guides who have good English skills will provide comfort for foreign tourists and will have a positive impact on all things in the tourism industry sector (Erazo *et al.*, 2019).

World Bank data in 2016 showed that the quality of Indonesian professional workers who have competence in English communication skills are 44%, computer skills 36%, faster learning abilities 30%, thinking skills 33% and basic skills 13%. In addition, the Ministry of Manpower noted that Indonesia's obstacle in the ASEAN Economic Community is English communication. The results of the EPI (English Proficiency index) survey in 2020 held in 88 countries, Indonesia ranked 74th out of 100 countries and ranked 15th out of 24 Asian countries. Indonesia survived from 2020 into the low ability category with a score of 453 (low proficiency). While Singapore rank is at the first with a score of 611 (very high proficiency), Malaysia is at third with a score of 547 (high proficiency) and the Philippines is at the second rank with a score of 562 (very high proficiency). The data shows that Indonesia is left behind in the term of English skills compared to other ASEAN countries (EF Education First, 2020).

The development of teaching and learning in vocational education in Indonesia is very important to full fill the demand of the quality labor in free trade era of the ASEAN Economic Community (AEC) (Suartini, 2019). Lampung State Polytechnic (Polinela) as a vocational higher education institution also needs to prepare its graduates in the fields of knowledge studied and the ability to communicate in foreign languages, especially English. Silber-Varod, et al. (2019) stated that the core competence of communication in 21st century learning (21st century) is very important and dominant compared to six other core competencies such as; collaboration, communication, creativity, critical thinking, information literacy, problem solving, and social-emotional skills.

Polytechnic is a vocational higher education that aims to prepare students to get jobs or entrepreneur with certain applied skills which equivalent to a bachelor's program (S1). In carrying out this mandate of the law, Polinela proclaims and implements the motto "Preparing smart, professional and competitive graduates". By this motto, the Polinela's civitas academia will be moved out and always enthusiastic in educating students to become graduates who are able to compete not only at the national level but also at the ASEAN regional level and even at the international level.

Politeknik Negeri Lampung has a curriculum that provided learning English 1, 2, and 3 courses for students in all study programs. Unfortunately, the implementation has not made a significant contribution to improve students' English communication skills. The results of the TOEIC test (Test of English for International Communication) conducted by ETS (Educational Testing Service) in 2018 showed that on average 329, students' English communication skills were categorized at the basic level (average score of 329). There are five students (1%) at the basic work proficiency level (score 605-780), at the intermediate level or elementary proficiency plus (score 405-600) as many as 155 students (25%), at the elementary level or elementary proficiency (a score of 255-400) amounted to 311 students (51%), and at the beginner level or basic proficiency (score 5-250) there were 138 students (23%). It can be concluded that in general, students' skills in English communication are very low.

The achievement of English learning outcomes above cannot be separated from the role of lecturers, materials and English learning strategies applied in the teaching and learning process and how much students have the opportunity to practice English. The covid 19 pandemic in 2020 made the results of learning English in general at Polinela and Tourism Travel Study Programs in particular not optimal. The learning process carried out face-to-face no longer could be done to avoid the spread of the COVID-19 virus, therefore learning process used an online system using social media such as WhatsApp, Twitter, Instagram and teleconference applications such as Google Meeting and Zoom. New normal conditions where the learning process was forced conducted online, so that new problems arise such as learning delivery less interesting and boring. Giving assignments by lecturers without considering the psychological and emotional aspects of students also created new problems.

The results of observations by researcher showed that independent learning resources (modules, handouts and web learning) were very limited. The problem of the availability of independent learning resources was a priority need to be resolved, considering that there were a few opportunities for students to practice English outside of the classroom. Another problem in learning tourism English at the Travel and Tourism Study Program at Polinela was lack of opportunities for students to practice their English language skills. The tourism English course, namely professional English for tourism, is only given in two semesters, each with two semester credit systems (2 credits: 1 credit for theory and 1 credit for practice). In a week, students are only given 50 minutes of theory and 120 minutes for practicum. The use of English as a habit where it was practiced with friends, lecturers and people around did not occur so that the experience of practicing English was less. Roblyer, et al., (2010) stated that common problems in learning foreign languages include the lack of opportunities to use foreign languages by teachers and students in their environment. Therefore, it is necessary to design a learning model where students can use language optimally to expose English by listening to native speakers and practice examples of using English (language expression) in everyday life. The results of a research which conducted by Wahyuningsih and Afandi (2020) on the problem of speaking English showed that students did not master adequate vocabulary, less proficient in grammar, less precise in pronouncing words, lack of English input outside class, lack of self-confidence, and lack of curriculum for developing speaking skills. Learning English for tourism should emphasize two aspects of language competences namely; listening and speaking, general conversation, providing services, providing information and offering assistance, giving information, offering help and requests for cooperation (Bury and Oka, 2017).

Educational technology has roles in solving the learning problems such as facilitating learning and increasing learning outcomes or improving learning performance. Improving students learning outcomes or achievements need to considering internal and external condition factors. Internal factors or student characteristics (learner characteristics) are related to memory (stored memories), mental conditions (state of mind) and students' intentions or willingness and learning goals while external factors include the learning environment, learning resources, learning management where the two factors are interconnected (Gagne, Robert M, 2005). Therefore, learning will occur when students can connect internal and external conditions so that the changes in knowledge and skills occur (changes of behavior) where this could be called a learning condition. Creating learning conditions both internally and externally, we can start by designing a good instructional model.

The instructional design model is a learning planning system model that has several characteristics, including; the process of determining goals, selecting and developing materials that intervene in the learning process and using feedback from students to improve learning instruction. Gagne (2005) assumed that learning and the desire to use

learning conditions as a framework for designing learning, so we can develop learning resources by utilizing technology and media. Technology and media have a very important role in learning (Smaldino, et al., 2008). The best technology and media are those can be used to promote student. One of the developments of learning models is by using technology, such as on line modules based on hypermedia.

The development of hypermedia-based learning design models can use media such as e-modules in the form of learning modules which learning materials are in the format of books or text documents (hypertext) that are stored on a hard disk, CD, or flash disk and can be read using a computer through offline or online. Along with the development of information technology in the industrial era 4.0, electronic modules developed into electronic modules. E-module contains not only document text (hypertext) but more than just document text that is integrated (linked) with other multimedia technologies such as audio, graphics, images, animation or video in other words hypermedia-based. Hypermedia can be described as an information management tool (software) that allows linking related pieces of information or concepts in a text, to issue an underlying knowledge base structure so that information retrieval is simplified and facilitated (Louw and Bredenkamp, 1994).

Hypermedia-based learning models in developing learning materials can be in the form of online modules or electronic modules (e-modules) which are developed using multimedia applications that combine various media features in the form of article text, images, graphics, music, animation, and videos, as the result it will be more interesting, and more interactive learning media. It also can be accessed by online through the android application or barcode scanning application on android mobile phones, PCs, laptops and other electronic reading devices. Hypermedia-based learning design with E-modules can be an independent learning medium for students (self-study).

The digital advances make the millennial generation more familiar with Android phones compared to textbooks. The digital marketing e-marketer research institute estimates that in 2018 the number of active smartphone users in Indonesia is more than 100 million people, while Indonesia's population is 250 million. The shift of text books and module texts into electronic books (e-books) and electronic modules is unavoidable because advances in information and technology (IT) e-books and e-modules can be compiled with multimedia applications that combine various media in the form of text, images, graphics, music, animation, video, and interactions into digital files (computerized) so as to produce learning media that are more interesting, and more interactive.

Hypermedia-based English learning model with e-module applications can be accessed with android gadgets. The publication of e-modules in the form of applications uploaded to a Playstore can also make easier for anyone to access and study English more effectively and efficiently so that the instructional objectives of learning can be achieved better. The use of online modules in the learning process will foster creativity, productive thinking habits, create active, effective, innovative, and fun conditions, and can develop literacy skills in students. Learning with electronic modules, lecturers can deliver all English material according to the learning targets without sacrificing the learning effectiveness because students can learn the material early through smartphones or computers that can be accessed anywhere and anytime with high flexibility therefore lecturers have time to provide more detailed explanations about the material being taught that considered difficult by students. Learning interactive hypermedia will make the learning process more fun, clear, teaching time can be reduced, and very flexible because teaching and learning can be done anywhere and anytime. The use of hypermedia makes students more happy (enjoyable), motivating, interacting, easy to understand, and encouraging independence (Gaudence *et al.*, 2018). Therefore lecturers should develop their own multimedia applications in order to contribute effectively in solving some learning problems (Babiker, 2015).

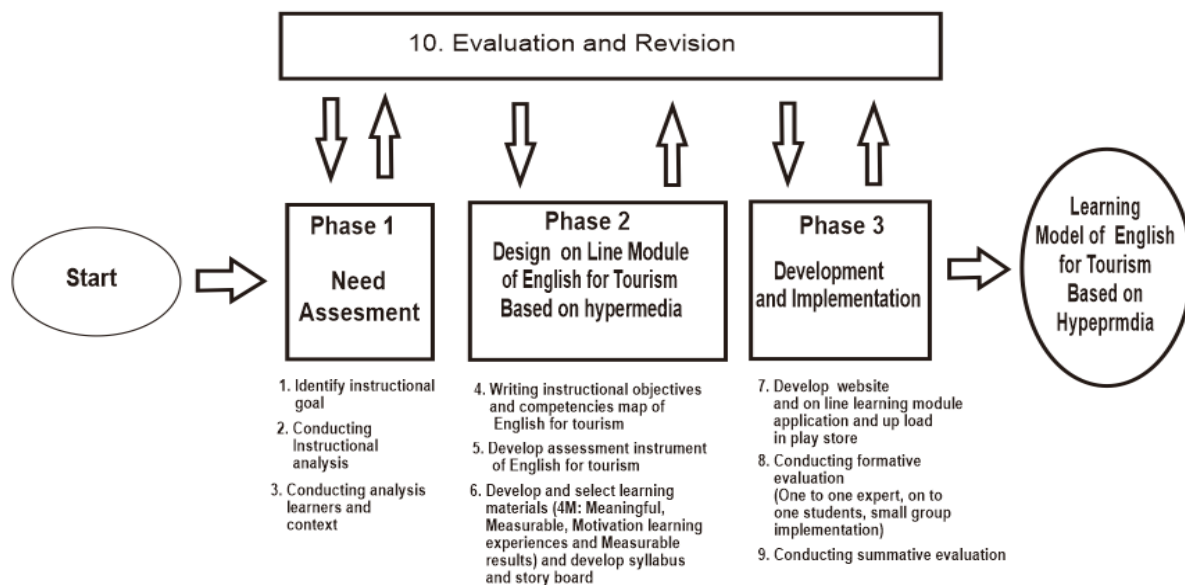
Based on the description of the importance of intervening on learning conditions both internally and externally, and to make the tourism English learning process more optimal, researcher is interested in developing a learning model based on hypermedia for tourism English at Politeknik Negeri Lampung as an alternative independent English learning model that where similar research has never been done before.

2. Method

The learning model of English for tourism based on hypermedia was a research development method (R & D) which aims to improve the quality and quality of education. The Research and development of learning model of English for tourism based on hypermedia used a combination model of the Dick, W. & Carey (2015), Peck (1988), and Allen (2007) models.

This research consisted of four major phases; 1) Needs assessment, 2) on line module design, and 3) development and implementation.

- 1) Needs assessment;
 - Identify instructional goals
 - Conducting Instructional Analysis
 - Conducting Analysis of Learners' Characteristics and Context
- 2) On line module design
 - Writing Instructional Objectives
 - Develop Assessment Instruments
 - Develop a learning strategy
 - Develop and Select Instructional Materials
- 3) Development and implementation
 - Design and conduct formative evaluation of learning materials
 - Revision of learning materials and
 - Design and Conduct Summative Evaluation
 - Evaluation and Revision



Picture 1: Instructional model of English for tourism based on hypermedia (combination of Hanaffin And Peck Dan Dick & Carey an Allen Models)

3. Result and Discussion

The development process of learning model of English for tourism based on hypermdia through on line modules combined three models of the Dick and Carey, Hannafin Peck and Allen Model which is divided into four phases;

3.1. Stage One; Needs Analysis;

3.1.1. Identify and determine general instructional of general student English,

The identification of general objectives at this stage uses an analytical approach where the final goal (front-end analysis). What kind of abilities will be achieved at the end of learning English in tourism at the Polylinela Travel Study Program according to the SKKNI in the tourism sector.

The identification of general objectives of learning English in tourism is carried out using four general approach methods as suggested by Dick and Carey (2015), namely; 1) Subject-matter expert (SME) approach in tourism English learning (ESP; English for specific purposes); 2) Content outline approach; 3) Administrative mandate approach, and 4) Performance technology approach. Researchers used three approaches in determining the instructional objectives of learning English tourism in the Lampung State Polytechnic Travel Study Program, namely; the first is the subject-matter expert (SME) approach, the second is the content outline approach and the third is the performance technology approach.

Based on the results of the identification of the general objectives of learning English in tourism, which were carried out with three approach methods; subject-matter expert (SME) approach in tourism English learning (ESP; English for specific purposes), content outline approach, and performance technology approach can serve as instructional purposes for tourism English learning is "Students can actively communicate English orally (spoken) and written in the context of the tourism industry."

3.1.2. Conduct instructional

The second step is to conduct an instructional analysis. Instructional analysis is to identify skills and knowledge that must be mastered in instructional (Dick, W. & Carey, 2015). In this step the researcher carried out three activities, namely; 1) Classify the objectives of learning English for tourism into learning domains (intellectual skills, psychomotor skills, attitudes, and verbal information), 2) Arrange and sequence the main steps needed to achieve tourism English learning objectives, and 3) Analyze supporting skills/competencies (subordinate skills) by examining each step to determine what students need to know and be able to do before they reach the general goal of learning tourism English.

Language is generally categorized into two, namely spoken and written. Meanwhile, the skills are divided into four skills, namely, listening (listening), speaking (speaking), reading (reading) and writing (writing). The four skills in language productivity are grouped into two, namely receptive skills or language acceptance skills; listening and reading and productive skills or language expression skills; speaking and writing (Davies, (2000), Lenny Johana Alvarado Rico (2014)). The learning domain is divided into several skills, namely; intellectual skills, psychomotor skills, attitudes, and verbal information (Dick, W. & Carey, 2015). Gagne in Suparman (2012) states that the capacity or ability in the cognitive domain or friend is divided into three skills, namely; intellectual skills, verbal information and cognitive strategies.

3.1.3. Conduct analysis of learners and context

In this third step, the researcher conducted an analysis of students, namely students of the Travel Study Program, Economics and Business Department at the Lampung State Polytechnic and context analysis, namely tourism industry stakeholders such as tour and travel companies, hotels, restaurants and tourist destinations. At this stage, the researchers conducted interviews and provided questionnaires (google form) for students and tourism stakeholders. Questionnaires and interviews with students were conducted to obtain information about; (1) The initial ability of the student's tourism English, (2) Prior knowledge of the subject matter to be given, (3) Attitudes or responses to content and material delivery systems, (4) academic motivation, (5) Education level and ability, (6) Preferences/favorites for learning in general, (7) Attitude towards organizations/ institutions that provide instructional learning in this case the travel study program, and (8) Group characteristics.

Context analysis to find out information from stakeholders where English for tourism will be used for example DUDI in the tourism sector and tourism organizations or associations such as ASITA (Association of Indonesian Travel Agencies), HPI (Himpunan Pramuwisata Indonesia), IGHMA (Indonesian Travel Agencies). General Hotel

Manager Association), and AELI (Association of Experimental Learning Indonesian). Context analysis was carried out by providing a questionnaire/questionnaire and unstructured interviews in several institutions and the business and industrial world in the tourism sector. In this activity the researchers also paid attention to the characteristics of the tourism industry, especially in Lampung to solve the problem of tourism English communication skills faced by the tourism industry and business (DUDI) sector.

The results of the analysis of students at the Tourism Travel Study Program, Department of Economics and Business of Polinela, showed that English language skills are still quite low. The average score of the TOEIC (Test of English for International Communication) test which was followed by 69 people was 185 at the basic level. Based on the level of English proficiency there were 17 people at beginners level (score 255-400), 45 people were at the basic level (score: 255-400), 6 people were at the lower intermediate level (score: 405-600) and 1 person was at the middle level (score: 405-600). While the value of learning outcomes for the first semester of in English class which were attended by 110 students showed that the students' English skills about 30 students (27.3%) were A grade, 51 (46.4%) got B grade and 29 people (26.4%) got C grades.

The results of the self-evaluation questionnaire for the tourism English language skills of the Polynela Travel Study Program students based on the Indonesian National Work Competency Standards (SKKNI) sub-sector travel agency sub-sector number (No. Kep 238 / MEN / X / 2004) shows that competence spoken English, reading and writing are still not as expected.

Students' speaking skills related to communication with tourists and colleagues related to basic English and daily activities at work and tourism service activities are sufficient while understanding and using polite and friendly sentences and knowing when to use formal or informal was as good as talking over the phone. The results of the questionnaire on students' reading ability in English for tourism in the table above, it could be seen that students' competences in reading general signs of the tourism industry in English is sufficient, reading working documents is as good as reading and understanding work. instructions and work procedures, while the ability to read graphs is sufficient. While the results of the self-evaluation of students' writing skills in table 3 showed that the competences of students in writing messages, instructions, and identity in English when receiving calls is sufficient, as well as the ability to write in basic and everyday documents in English at work. While the competence to fill out the form is good.

The results of the contextual analysis of stakeholders regarding the needs of tourism English used in communicating with foreigners or foreign customers were obtained from the questionnaire. The questionnaire was given on line (online) using a google form to the tourism industry stakeholders. The google form application help researcher to analyze data easier because the google form can automatically present the results of data analysis graphically and can be exported to excel data. The questionnaires were distributed via social media Whatsapp (WA) to tourism industry stakeholders, tourism associations, hotel students and the tourism office in Lampung province. The number of respondents who responded to the online questionnaire was 158 which consisted of elements; tour and travel (17 respondents), hotels (71 respondents), tourist destinations (4 respondents), tourism offices (5 respondents) and hospitality students (51 respondents), educators in the tourism sector (5 respondents) and professional certification bodies in tourism (2 respondents) and course institutions in the field of tourism (3 respondents).

The results of the analysis of the tourism English competency questionnaire of the stakeholders according to the SKKNI (Indonesian National Work Competency Standard) in the tourism sector for the travel agency sub-sector number (No. Kep 238 / MEN / X / 2004) are divided into three competencies namely; 1) communicating in spoken English, 2) my ability to read and 3) writing skills.

1) Competences of stake holders in speaking English

The competences of stakeholders in English speaking skills has been identified based on the results of the questionnaire analysis. The questionnaire covered three aspects of speaking ability to communicate in spoken English with tourists and colleagues, understanding and using polite and friendly sentences verbally both formally

and informally, and speaking by telephone. The following table shows the results of stakeholder competencies in speaking skills related to English for tourism in the workplace.

Table 1: Competences of tourism stake holders in speaking English

| No. | Tourism English Competency | Worst | Fair | Good | Excellent |
|-----|--|-------|-------|-------|-----------|
| 1 | My ability to communicate in spoken English with tourists and colleagues regarding matters relating to basic and daily activities at work and tourist service activities | 3,6% | 26,6% | 43,7% | 23,4% |
| 2 | My ability to understand and use polite and friendly sentences verbally and know when to use formal or informal sentences in English. | 3,8% | 24,1% | 41,1% | 31,0% |
| 3 | My ability to speak by telephone (greeting, leaving a message, asking apology, and offering helps) in English. | 3,8% | 26,6% | 38,0% | 31,6% |

The table above shows that the speaking skills of stakeholders related to communication with tourists and colleagues related to basic and daily activities at work and tourism service activities, understand and use polite and friendly sentences verbally and know when to use formal or informal and talk over the phone mostly were good.

2) The ability of stake holders in reading

The second analysis regarding stake holders' English reading competence includes reading general signs of the tourism industry in English, reading work documents and reading and understanding work instructions and work procedures, while the ability to read graphs is sufficient. The results of the analysis in the following table;

Table 2: Competences of stake holders in reading

| No. | Tourism English Competency | Worst | Fair | Good | Excellent |
|-----|---|-------|-------|-------|-----------|
| 1 | My ability to read general signs (signates, logos/images, and signs) of the tourism industry in English | 6,3% | 29,1% | 34,8% | 29,7% |
| 2 | My ability to read working documents (brochures, leaflets, memos, emails and facsimiles) in tourism English. | 2,5% | 30,4% | 39,9% | 27,2% |
| 3 | My ability to read and understand work instructions and work procedures in English (guidance modules, memos, emails, and leaflets/brochures). | 3,8% | 27,2% | 43,7% | 25,3% |
| 4 | Ability to read diagrams / charts / graphs in English (tourism trend graphs, reports, etc.) | 6,3% | 39,9% | 38,0% | 15,8% |

The ability of the stakeholders in reading English for tourism in the table above shows that the competence in reading general signs of the tourism industry in tourism English is good, in reading work documents and in reading and understanding work instructions and work procedures, reading graphs is also in the good category.

3) The ability of stake holders in writing English

Writing competencies that are standard in the SKKNI (Indonesian National Work Competency Standard) in the field of tourism work include; the ability to write messages, the ability to fill out or fill out forms and write basic and everyday documents in the workplace. The results of the analysis of the ability of stakeholders in writing skills are shown in the following table:

Table 3: Competences of of stake holders in writing English

| No. | Tourism English Competency | Worst | Fair | Good | Excellent |
|-----|---|-------|-------|-------|-----------|
| 1 | My ability to write messages, instructions, ID in English when receiving a telephone. | 5,1% | 27,8% | 38,6% | 28,5% |
| 2 | My ability to complete or fill out forms in English (registration form, travel schedule form, insurance claim form, passport form, visa form, report form, map and graphic form). | 4,4% | 25,3% | 46,2% | 24,1% |
| 3 | My ability to write basic and everyday documents in English at work (flyers, messages, correspondence, memos, emails, simple instructions/procedures, customer manuals etc.) | 7,0% | 27,2% | 41,8% | 24,1% |

Based on the results of the analysis of the writing skills of stakeholders, it showed that the competence of stakeholders in writing messages, instructions, and identities in English when receiving a call was as good as writing in basic and everyday documents in English at work. While the competence to fill out or fill out the form is good.

The results of the questionnaire show that the tourism English materials desired by tourism stakeholders to improve their competence include; speaking, listening, reading, writing, grammar, vocabulary, pronunciation, tour guide, interpreter, culinary, literature, handling complaints, hospitality, public speaking, and storytelling,

3.2. Stage Two. Designing Instructional Model of English for tourism based on hypermedia

3.2.1. Writing instructional objectives, and tourism English competency maps

In this step the researcher wrote instructional objectives that describe in detail what kind of competencies that students should be able to do after they completed each learning unit in the tourism English e-module (on line module). Researchers wrote general and specific instructional objectives. General instructional objectives are guided by Bloom's taxonomy (1959) which has been revised by Krathwohl and Anderson which consists of three areas, namely; 1) cognitive (ability to remember, understand, apply, analyze, evaluate and create), 2) affective (receiving, responding, and creating, appreciating, organizing, characterizing according to values), 3) psychomotor (imitating, manipulating, precision, articulation, naturalization).

Specific instructional objectives (SIO) can be translated as specific instructional objectives. SIO contains elements that can provide clues to be able to develop tests and can actually measure student behavior. The elements contained in SIO are ABCD (**A**udience, **B**ehavior, **C**ondition, **D**egree); Audience are students, Behavior is specific behavior that will appear after the learning process using tourism English e-modules, Condition is a condition or limitation imposed on students or tools used in learning, and Degree is the level of success of learning which in this case tourism English course.

The results of the preparation in writing special instructional objectives for tourism English for students of the Tourism Travel Study Program, Department of Economics and Business in Polinela which was an elaboration of the general instructional objectives, namely "Students will be able to fluently communicate English orally (spoken) and written in tourism industrial context." The specific instructional objectives of tourism English are adapted to the context and situation of the usage English in tourist attractions which were divided into several language skills such as listening, speaking, reading, writing, and language use and vocabulary. The examples of the specific instructional objectives of the tourism English learning electronic module; If given examples of English communication with various media, both video, audio, and online text in e-modules about conversations and readings at the Tour and Travel Agency, students will be able to communicate verbally (spoken) and writing in the context and situation at the Tour and Travel Agency at least 80% correctly.

3.2.2. Developing tourism English assessments,

The fifth step is to develop an assessment instrument that aims to determine whether students can achieve the performance objectives in tourism English learning. Researcher developed an assessment instrument (criterion-referenced assessment) that can directly measure the competencies written in the instructional objectives. Assessment instruments in the form of pre-test and posttest. In developing the assessment instruments, the researcher first makes an assessment grid.

a) Pre-Test Initial Assessment Grid

The initial test or pretest is designed to assess students' initial abilities before learning English for tourism using an electronic module (on line module) of hypermedia-based English learning. The pre-test includes an initial ability assessment of four tourism English skills, namely speaking, listening, reading and writing. The pre-test grid has been made to eased developing of the test.

b) Post Test Assessment Grid

The final test or posttest is designed to assess students' initial abilities after learning tourism English using an electronic module of hypermedia-based English learning. The posttest includes an assessment of the final ability of the four tourism English skills, namely speaking, listening, reading and writing.

3.2.3. Developing learning strategies or Develop Instructional Strategy

In this sixth step, the researcher modified the learning model, namely the Allen model (2007) into the development of a hypermedia-based learning strategy for the model of tourism English learning. There are three main steps to be taken they were;

- a) The pre-instruction phase, in developing learning strategies, several things such as attitudes, motivations and skills before formal learning begins.
- b) The learning phase (instruction phase), in developing a learning strategy, the researcher considers all behavioral factors and other influencing factors that occur during learning or training (4Ms; Meaningful, Memorable, Motivational learning experiences and Measurable results).
- c) Stage of learning outcomes (performance). In this third stage, assessing learning outcomes which include all changes in behavior during learning or training and in terms of improving performance.

The development of English learning model based on hypermedia must have a meaningful, memorable, motivational learning experience so that there was an increase in better grades after learning. The strategy of material development as far as possible creates 4Ms, namely; 1) meaningful, 2) memorable, and 3) motivational learning experiences and 4) measurable learning outcomes.

The preparation of learning development strategies also considers several opinions from experts such as Smaldino, et al. (2008) and Gagne (2005) on how to design module. Smaldino. et al. (2008) stated that the learning module is a set of independent learning materials designed to be used by one student or group without the presence of a lecturer or teacher. The hypermedia-based tourism English learning electronic module is an independent online learning module that can be accessed online via an android gadget or mobile phone as well as a personal computer (PC). Therefore, the tourism English learning electronic module contains several components, they were;

- a) Introduction (rationale); contains an outline of the contents of the module and why students need to study it,
- b) Learning objectives (instructional objectives); contains what will be achieved and mastered after learning independently,
- c) Initial test (pretest); a test that measures things or knowledge that was mastered before learning,
- d) Hypermedia learning material (multimedia materials), contain of a variety of technologies and online learning media to encourage students more active and use all five senses.
- e) Learning activities; includes learning activities with various strategies and media that increase interest and meet student needs.

- f) Practice feedback; contains exercises for each unit of learning objectives and correction of answer keys.
- g) Final Test; contains a final assessment to measure whether students have mastered all the learning objectives in the module.

In this sixth step, the researcher developed a learning strategy, namely how to make the contents of the English unit in the hypermedia-based tourism English learning e-module was delivered. The learning strategy was developed based on a self-regulated and hypermedia-based learning model.

The development of an English e-module learning strategy in the form of an Android-based application or software is organized into five main learning components by Gagne (2005) as part of an overall learning strategy. The five components were included;

- 1) Pre-structural activities; Researchers will identify what students must do before learning and doing assignments in units in e-modules.
- 2) Content presentation; The researcher presents English contents for tourism in an e-module as attractive as possible with hypermedia-based learning material contents. Researcher selected, adapted and modified English language materials for tourists in the form of videos, audio, text, exercises and quizzes so that they are more interesting and fun. The source of the tourism English materials were obtained from various sources for instance; from libraries both offline and online (textbooks, e-books, modules, hand out e-modules) and sources from the internet (youtube, MP4 audio, MP3 and audio books). (Hamad et al., (2019) stated that; "...YouTube videos and Listening Audio Tracks Imitation (YATI) is a very effective CALL (Computer-Assisted Language Learning) tool towards improving students' speaking skills. This study recommends the use of YATI approach in order to help students overcome speaking problems. Youtube and imitation audio tracks are very effective for improving English speaking skills and are recommended as solutions to solve problems in speaking mastery. Wang and Chen (2020) stated that learning English using Youtube is to get more learning resources (explore more learning resources), attracted students' attention to learn English, and increased cultural. Bardakci (2019) suggested that students should use Youtube to improve their academic competences.
- 3) Student participation; The researcher designed an active involvement of students in learning with role play. Researchers designed an e-module application by adding direct communication media such as Whatsapps (WA) and email so that lecturers and students could communicate directly (WA) or indirectly (email). Chavangklang and Chavangklang (2018) provided recommendations in the preparation of learning materials using role play learning activities. He stated that role play activities were the highest activity in terms of student learning satisfaction.
- 4) Assessment; Researchers developed an assessment system for each learning unit by considering its effectiveness and efficiency. For example, evaluation questions were arranged according to the level of difficulties, the number of questions were not too many, students could find out the score directly and corrections in each questions after completing work, some questions were made in the form of google form so that it was fun not burdensome and students without realized that they had improved their English language skills. Researchers compiled formative evaluations for each unit to determine the progress of learning outcomes and summative evaluations to determine the overall level of learning achievement. Palacio et al., (2016) stated that; "*Naturally, improvement of student learning may require a longer period of development and observation. We need to continuously examine student performance on tests and monitor progress to be able to establish the degree to which course standards are being attained.*" It was natural that improving student learning requires a longer period of development and observation. We need to continuously assess the performance of participants with tests and monitor their learning progress to be able to determine the extent to which learning standards or courses are being achieved.
- 5) Follow-up activities; The researcher designed a learning strategy in which the lecturer could provide an overall review to determine whether the student's memory and knowledge transfer needs had been met. The delivery system in the tourism English e-module used Android-based instructions application and internet web access which formed independently to guided learning, exercises interactive multimedia to facilitate lecturers, simple online syllabus to comprehensive solutions organized in learning portals covering content, instruction, interaction and assessment. Hendikawati et al., (2019) stated that the development of Android-

based learning media (Android-based CAI: Computer Assisted Instructional) could be used as a learning resource and can support self-regulated learning.

3.3. Stage Three. Developing and Implementing

3.3.1. Develop and Select Instructional Materials

At the stage of developing and selecting materials in tourism English learning e-modules, it is necessary to consider three factors in the selection of media and delivery systems, namely;

- 1) Availability of existing teaching materials (textbooks, modules or handouts, ppt, video, audio, etc.) in travel study programs, online libraries and online sources on the internet. The availability of these materials is possible to be selected and or adapted and modified according to the needs of the tourism sector and is current or up to date. Shen et al., (2014) stated that up-to-date information in English material is useful for developing students' understanding of English or culture.
- 2) Production and implementation constraints, in solving production constraints and problems or making software for e-module application for tourism English learning, researchers involve IT personnel inside and outside the Polinela campus. Development of hypermedia-based e-module materials by creating various materials that were linked to one another and utilizing online material sources such as YouTube, websites, weblogs, google forms, google classroom, google maps, and social media applications (Instagram and WhatsApp). As for the implementation of the use of the tourism English e-module, the researcher involved students, lecturers, design experts, tourism English content experts and learning instructional experts. Han, 2010 in Zhang (2020) stated that: material sourced from the internet and video or audio that has been edited or recorded by the teacher should be the target and the main key language material must be explained but it should not be too long because it will cause excess student cognitive knowledge to become a problem and have a serious effect on student learning outcomes. The use of google forms in making test questions in the module will make it easier for students to work on questions with a PC, notebook or Android, while the convenience for lecturers was in terms of correcting student answers, because lecturers do not need to correct manually. Nguyen *et al.*, (2018) stated that google forms is a free online application that can be used in the classroom to increase student participation, encourage participation in the learning process, and evaluate learning. He also added that the google form is easy to use (user-friendly), easy to administer and helps teachers save paper and save time on assessment.
- 3) The number of facilities provided by lecturers or instructors during the learning process using the e-module of the student English language. The facility to access the e-module application is enough to use an android phone, computer (PC) or netbook that is connected to the internet. In this step the researcher searched for and selected tourism English materials suitable for tourism in libraries (textbooks and textbooks) and online sources; movies, videos, audio, websites, and YouTube, then adapted to meet instructional objectives.

At this stage the researcher also developed and selected materials for an English e-module for hypermedia-based tourism starting with developing rough concept materials and material prototypes quickly. The English Tourism materials must contained 4Ms, namely; 1) Meaningfulness, 2) Memorable, and 3) Motivational learning experiences and 4) measurable learning outcomes. Electronic module learning materials are obtained from various sources, both offline (textbooks, modules, magazines, brochures and handouts, videos, MP3, Mp4) and online (websites, blogs, YouTube, social media, and e-mail).

In this seventh step, the researcher also developed a storyboard to visually described what would be done in developing a hypermedia-based tourism English module. The storyboard was created as a means of producing which is then used by researchers to create a physical form or final draft of hypermedia-based e-module development. Creating a storyboard was made on a working paper in the form of a chart image as a mapping of the results of the analysis of objectives and learning. The chart images were included in the menu plan created on the website, including: user manual, materials (listening, speaking, reading and writing), audio, video, language use exercises (practices), dictionaries and bibliography. The menus on the hypermedia-based tourism English learning e-module website were developed and compiled as a project outline that describes all components of the hypermedia-based e-module, learning materials in the form of pdf word text, pdf PowerPoint, user manuals,

materials (listening, speaking, reading and writing), audio, video, language use exercises (practices), games, dictionaries and bibliography of instructions for using hypermedia-based tourism English learning e-modules.

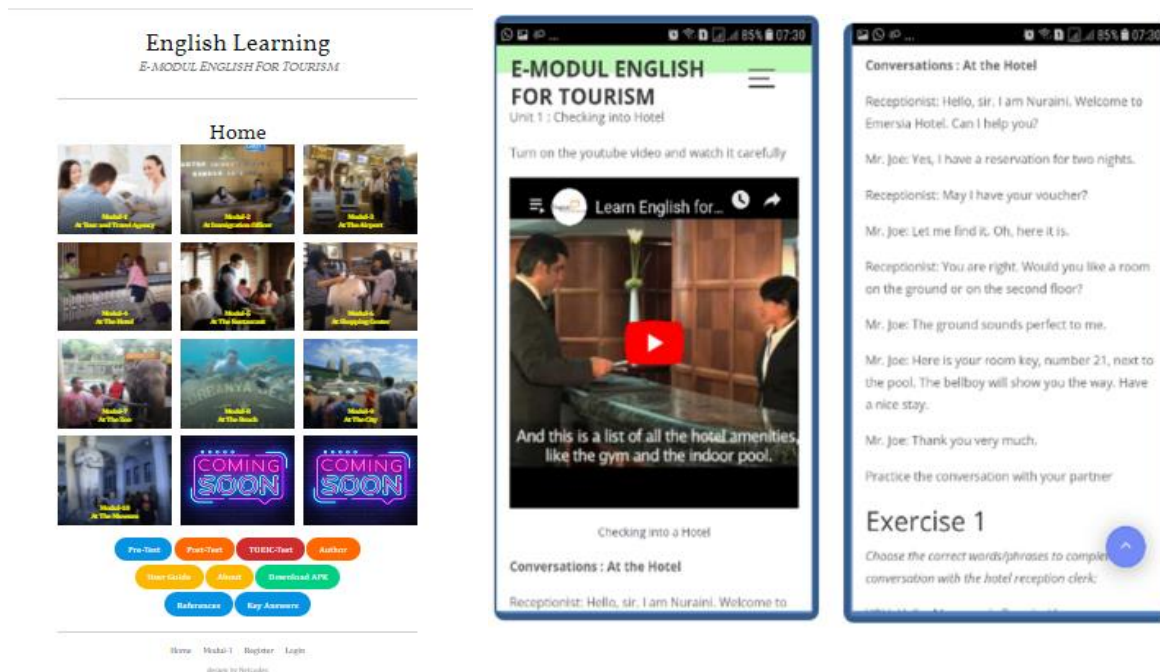


Figure 2: Display of Tourism English E-module

The steps for developing the hypermedia-based tourism English learning electronic module before being uploaded to the website they were; 1) composing scripts, 2) display design, 3) text typing, 4) provision of photos and pictures, 5) providing of conversational materials (speaking), 6) providing of listening materials, 7) provision of reading materials 8) provision of writing materials (writing) 9) provision of language usage materials (language usage) 10) provision of vocabulary materials 11) provision of assessment materials (pretest and posttest) 12) provision of video materials 13) provision of audio materials 14) provision of exercise materials 15) discussions with colleagues.

Electronic module material or hypermedia-based tourism English e-module that has been compiled manually and then uploaded on the website so that it could be accessed in the form of Android-based applications (apps) and website portals (<https://englishlearning.serbaonline.id>) which could be accessed via an android phone (smartphone), PC or netbook connected to the internet. An English e-book for Tourism in the form of an application could also be uploaded and published on the google play store so that it can be accessed anytime and anywhere by students or users.

3.4. Evaluation and Revision

In this eighth step, the researcher designed and conducted a formative evaluation of learning materials to collect data and information during the development of a tourism English e-module that could be used to increase the effectiveness and efficiency of learning using a hypermedia-based tourism English e-module. In conducting formative evaluation, researcher evaluated as follows;

3.4.1. Conduct a one-and-one evaluation or clinical trial

One-to-one evaluation is divided into two they were; one-to-one evaluation by experts and one-on-one evaluation by students (one to one learner). One-on-one trials carried out by experts created a validation instrument that was validated by experts to test the feasibility of content, design, and language. The expert validation questionnaire instrument (one to one expert) before being used was validated by the expert in terms of language clarity so that it

did not cause multiple interpretations. Instrument validation is used to measure aspects of the clarity of the measurement objectives that were formulated, the suitability of the questions for each aspect, the use of language, and the clarity of the instructions for using the instrument. The instrument validator to see the feasibility of the linguistic side (construct) was reviewed by a linguist. The results of instrument validation from linguists showed that the legibility of the validation instrument was good. As for grammar, linguists suggest that; The wrong use of punctuation marks, the use of capital letters, and the writing of foreign terms and compound words. Grammatically, such writing errors were relatively easy to correct, and did not interfere with the reader's understanding of the substance of the message conveyed by the author. Therefore, overall, the language of this questionnaire instrument could be said quite straightforward, easy to understand, and could be effective in communicating the author's message to the reader.

The validator intended to see the feasibility from the design side was reviewed by a learning design expert. There were three validators to see the feasibility from the media and content of English learning materials. The results of One to One Evaluation by learning design experts showed that the quality of the content of the hypermedia-based tourism English learning electronic module could be categorized as very good with a total score of 96.15. The instructional design expert (Instructional Design) suggested that there should be synchronization between general instructional objectives and specific instructional objectives with the needs of English in the field. Based on the evaluation of media experts the quality of hypermedia-based tourism English learning electronic modules from the aspect of module design, multimedia design, could be categorized very good with a total score of 96.15. Learning media experts suggest that photos and videos derived from Indonesian local facts would be better.

The evaluation one to one tourism English experts, the quality of hypermedia-based tourism English learning electronic modules from the aspects of speaking, listening, reading, writing, vocabulary skills, the use of language and grammar (language usage), exercises and test material (pre-test and post-test) could be categorized a good with a total score of 89.26. The expert provided some advices on the content of tourism English material, preferably based on functional, situational, task-based syllabus or content-based syllabus (how to book a room, how to use hotel facilities). While the other expert stated that the presentation E-module on English for tourism and hospitality was very complete and should give students the opportunity to function as starting professionals in this industry. He added that the materials on the tourism English e-module with the division made into several tourism and hospitality tasks and situations was in line with the possible actions that students who are responsible for daily activities and direct activities in the tourism industry should take. The material for making destination and tourist destination guides, making diagrams and writing reports it seem that additional practical training and training were needed because these materials were for the management level and not at the staff or staff level employee.

The inputs and suggestions from the tourism English experts above were used as the basis for improving or revising hypermedia-based tourism English learning e-module products. Revisions to the tourism English electronic module include;

- a) Synchronization of ICT with tourism English needs in the field,
- b) The use of photos, pictures and examples that are more local in nature or in accordance with the context of the Lampung or Nusantara area,
- c) Tourism English content is more focused on the situational syllabus or the approach to the situation and context in which tourism English is used,
- d) Adjusting the level of difficulty in tourism English material (level; elementary, intermediate or advanced)

3.4.2. Conducting Small Group Evaluation

One to one learner evaluation by students was carried out by involving three students with the criteria of one student with above average ability, one student with average ability, and one student with low or below average abilities. The three students involved in the evaluation were students of the Polytechnic Travel Study Program, Department of Economics and Business, Polinela. One-on-one evaluation aims to determine the impact of the level of instructional clarity, benefits or impacts for students, and the feasibility of the material.

The pilot activity by students (one to one learner) is to see the content, design and product display of the hypermedia-based tourism English e-module application prototype, so in this activity the researcher provides an application link or hypermedia-based English e-module website address

(<http://www.englishlearning.serbaonline.id>) and a google link for the questionnaire form to students (<https://s.id/EvaluasiSatuSatu>). Students were given the opportunity to study the tourism English electronic module independently (self-learning) by following the instructions for using the e-module online using an Android mobile device or gadget or PC and laptop. After seeing the prototype and learning all English skills such as speaking, listening, reading, writing, language usage and vocabulary, then students are asked to provide assessment with the google form that has been given.

The results of the evaluation of one student or student were based on the responses and assessments of the three students involved. Responses and assessments are found on the google form that has been sent to students via social media (WhatsApp) and email. The results of student assessments of the hypermedia-based tourism English learning electronic module could be categorized into very good.

The small group evaluation was carried out by involving 8 students of Polinela Travel Study Program who were randomly selected which generally represent the characteristics of the target population. Small group evaluation activities or small group trials were evaluating hypermedia-based English e-module application prototypes. Small group trials conducted by students (small group) were first made an evaluation instrument that was validated by experts or linguists to test whether or not the questionnaire instrument was tested by small groups. Small group evaluation aims to determine the impact of the level of instructional clarity, benefits or impacts for students, and the feasibility of the material.

Small group evaluation activities by students intended to see the content, design and product display of the hypermedia-based tourism English e-module application prototype, so in this activity the researcher provides an application link. Students were given the opportunity to study the tourism English electronic module independently (self-learning) by following the instructions for using the e-module online using an Android mobile device or gadget or PC and laptop. After seeing the prototype and learning all English skills such as speaking, listening, reading, writing, language usage and vocabulary, then students are asked to provide assessment with the google form that has been given. The questionnaire were about; (1) The material in the tourism English e-module is in accordance with the learning objectives (2) The clarity of the instructions and learning steps in the tourism English e-module (3) The tourism English e-module is easy to use (4) The ease of understanding what is learned in the tourism English e-module (5) Demonstration/practice stimulates learning experience (6) Exercise/practice in tourism English is sufficient and in accordance with the student's topic (7) Learning material for tourism English e-module is useful and appropriate (8) Test or assessment material according to the material and learning objectives (9) The test material in the tourism English e-module measures learning achievement (10) Feedback from the test material (11) Student satisfaction using the tourism English e-module (12) The tourism English e-module is interesting and available stimulate learning (engage) (13) Students are confident in doing practice/practice questions and tests (14) Tourism English e-module encourages independent learning, students' confidence and motivation to learn (15) Tourism English e-module encourages collaboration between students

The results of the evaluation of a small group of students were based on the responses and assessments of the eight students involved. Responses and assessments were found on the google form that has been sent to students via social media (WhatsApp) and email. The results of small group evaluations or small group evaluations by students indicate that the response of the subject or student is that the level of clarity, benefits or impact for students, and the feasibility of hypermedia-based tourism English e-modules are very good. However, students still take notes in the form of suggestions and opinions, including; 1) adding a feature to answer practice questions 2) students can immediately know the value and 3) providing a slightly more detailed explanation to make it easier to understand. Researchers in this case give attention and consideration to revising the tourism English e-module material by adding these features.

3.4.3. Conducting Field Trials

The field trial or field evaluation involved about 30 students in Tourism and Travel Study Program at Polienla who were purposely selected. The field trial activity was intended to see the content, design and appearance of the e-module application prototype product and the effectiveness of using hypermedia-based tourism English e-modules. In this field trial activity, researchers looked at the effectiveness of e-modules. tourism English module based on hypermedia. The field test was first made an evaluation instrument that was validated by an expert or linguist to test whether or not it is appropriate for a small group trial questionnaire instrument. Next, the researcher asked the students' willingness to be involved in a field test (field evaluation) of the hypermedia-based tourism English learning electronic module product. The researcher sent the application installer (APK), the e-module website link (<http://www.englishlearning.serbaonline.id>) and the evaluation questionnaire link.

In the field trial, students were given an initial test (pre-test) and given a few weeks to study the tourism English electronic module independently (self-learning) by following the instructions for using the e-module online using an Android mobile device or gadget or PC and laptop. After seeing the prototype and learning all English skills such as speaking, listening, reading, writing, using language and grammar and vocabulary, then students are given a final test (post test) and asked to provide an assessment using the google form.

The results of the evaluation or field trials were based on the responses and assessments of the research subjects (30 students) involved. Responses and assessments were found on the google form that has been sent to students via social media (WhatsApp) and email. The questionnaire of field trials were about; (1) The material in the tourism English e-module is in accordance with the learning objectives (2) The clarity of the instructions and learning steps in the tourism English e-module (3) The tourism English e-module is easy to use (4) The ease of understanding what is learned in the tourism English e-module (5) Demonstration/practice stimulates learning experience (6) Exercise/practice in tourism English is sufficient and in accordance with the student's topic (7) Learning material for tourism English e-module is useful and appropriate (8) Test or assessment material according to the material and learning objectives (9) The test material in the tourism English e-module measures learning achievement (10) Feedback from the test material (11) Student satisfaction using the tourism English e-module (12) The tourism English e-module is interesting and available stimulate learning (engage) (13) Students are confident in doing practice questions and tests (14) Tourism English e-module encourages independent learning, students' confidence and motivation to learn (15) Tourism English e-module encourages collaboration between students.

The results of the Field Trail evaluation of 30 students showed that the subject's response was that the level of clarity, benefits or impact for students, and the feasibility of hypermedia-based tourism English e-modules were very good. However, students still take notes in the form of suggestions and opinions, including; 1) adding a feature to answer practice questions both essays and multiple choice, 2) students can immediately find out the value after doing the exercises and 3) provide a slightly more detailed explanation to make it easier to understand. Researchers in this case give attention and consideration to revising the tourism English e-module material by adding these features.

3.5. Effectiveness of Implementation of Tourism English E-Module

The implementation of the tourism English learning electronic module is to determine the effectiveness of e-module products on student learning outcomes. The researcher used data collection techniques for pretest and posttest in the form of objective test, performance test and essay test. The pre-test and post-test instruments were made in the google form application and developed based on a grid of tourism English learning indicators that have been formulated in the needs analysis. Indicators include the competences of speaking, listening, reading and writing.

Before the pre-test and post-test instruments were used, they were validated by an English grammar expert validator. Assessment of instrument validation using a value scale of 4, 3, 2, 1; namely 4 means very good, clear, and appropriate, 3 means quite good, clear, and appropriate, 2 means not good, clear and appropriate, and a value of 1 means very poor, clear and appropriate. Analysis of the data to calculate the results of the pre-test and post-

test scores of the tourism English e-module implementation test using a paired t-test. Before the t-test was carried out, the norms and homogeneity were first carried out.

Table 4: 1 Uji t-test (Pair Sample Statistics)

Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|-----------|-------|----|----------------|-----------------|
| Pair 1 | PRE TEST | 58.05 | 37 | 9.189 | 1.511 |
| | POST TEST | 70.92 | 37 | 8.697 | 1.430 |

Based on the results of the t-test analysis in the table above, it is known that the calculation results are known to have an average initial test = 58.05 and a final test = 70.92. The number of respondents used as a sample is 37 students. The standard deviation for the pretest is 9,189 and the standard deviation for the post test is 8,697. The mean standard error value for the pretest is 1.511 and for the post test is 1.430.

Table 4: 2 Uji t-test (Paired Sample Test)

Paired Samples Test

| | | Paired Differences | | | | t | df | Sig. (2-tailed) | |
|--------|----------------------|--------------------|----------------|-----------------|---|---------|---------|-----------------|------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | PRE TEST - POST TEST | -12.865 | 4.498 | .739 | -14.365 | -11.365 | -17.398 | 36 | .000 |

Based on the output table "Pair Sample Test" above showed that the value of Sig. (2-tailed) of $0.000 < 0.05$, it could be concluded that there was a significant difference between the results of the English for tourism e-module on the pre-test and post-test data.

4. Discussion

The use of technology in learning is solely to facilitate learning and improve learning outcomes. The integration of technology in learning is very important for teachers or educators to do. Educators can develop various teaching materials based on information and communication technology so that learning outcomes will be more effective. The development of hypermedia-based tourism English learning model is inseparable from the use of information and communication technology. It is designed in the form of a website with various media content such as video, audio, text, images and graphics that are designed as attractive as possible so that it encourages and makes it easier for students to master English in contexts and situations in the tourism sector. Hamdan et al., (2017) stated that the layout of the website, specifically its design, color, font size, table, and diagrams, also affects the students' reading. A website, which is too crowded with information and advertisements, in readers losing concentration. Students can use the tourism English E-module by accessing it on line anytime and anywhere via android mobile gadgets or computers and laptops, so that students are very flexible in following the learning process to improve their English skills. The effectiveness of learning outcomes using tourism English e-modules can be measured by conducting formative evaluations involving students or students.

Referring to Allen's (2007) opinion, online learning designs or e-learning designs must contain at least three things, namely; 1) meaningful, 2) easy to remember (memorable), and 3) motivational learning experience. He explained that: "When designing and developing a learning intervention is an appropriate thing to do, focusing on just three

fundamental targets will guide your work and make success a high probability: make learning experiences M1) meaningful, M2) memorable, and M3) motivational,” which means when designing and developing a learning intervention the right thing to do is to focus on only three basic targets that will guide the designer's work and make the chances of success high, namely by making the learning experience 3M: M1) meaningful, M2) memorable, and M3) motivating.

Dick, W. & Carey (2015) argues that in developing instructional materials or products such as e-modules it must contain at least three aspects, namely; 1) clarity of instruction, 2) impact on learners, and 3) feasibility.

1) Clarity of Instruction

Clarity of learning in an instructional contains things, among others; the material is in accordance with the learning objectives, clear instructions and learning steps, easy to use, understands what is learned in the e-module, demonstrations/practical exercises to stimulate the learning experience, and adequate and appropriate exercises according to the topic (Smaldino, Sharon E, Lowtther, Deborah L , and Russell, (2008), Dick, W. & Carey (2015), Merril (2013)).

2) Impact on learners

Instructional material can be said to be effective if it has a good impact on students. The impact of learning includes; e-module learning materials are useful and appropriate, test materials measure learning achievement, tests or assessments according to learning materials and objectives, feedback from test materials and student satisfaction (Dick, W. & Carey (2015), Merril, (2013), Peck, (1988)).

3) Feasibility

According to experts, the feasibility of instructional materials includes things like; Attractive and stimulates learning (engage), confident in doing practice questions and tests, encourages independent learning, confidence and motivation to learn and encourages student collaboration (Smaldino, Sharon E, Lowtther, Deborah L, and Russel, (2008), Dick, W. & Carey (2015), Merril, (2013), Peck, (1988)).

Based on the results of a one-to-one trial or one-to-one evaluation by students (one to one learner) it shows that the language of the hypermedia-based tourism English electronic module is generally in the very good category, namely; a) The material in the tourism English e-module is in accordance with the learning objectives with a percentage level of 100%, b) The clarity of the instructions and learning steps in the tourism English e-module is very clear with a 100% percentage level, c) the tourism English e-module easy to use with a percentage level of 100%, d) Ease of understanding what is learned in the e-module is very easy to understand with a percentage level of 100%, e) Demonstration/practice exercises stimulate the student learning experience very much in accordance with the percentage level of 100%, f) Exercises /Tourism English practice is sufficient and in accordance with the topic with a percentage level of 100%, g) The tourism English e-module learning materials are useful and in accordance with the 100% percentage level, h) Test or assessment materials according to the material and learning objectives with a percentage level of 100 % , i) The test material in the tourism English e-module measures learning achievement with a percentage level of 100% , j) Feedback from the test material with a percentage level of 66.7% agree and 33.3% disagree), k) Student satisfaction using the tourism English e-module with a percentage level of 100%, l) Tourism English e-module interesting and there is learning (engage) with a percentage level of 100%, m) Students are confident in doing practice/practice questions and tests with a percentage level of 100%, n) Tourism English e-modules encourage independent learning, confidence and motivation student learning with a percentage rate of 100%, o) The tourism English e-module encourages collaboration between students with a percentage rate of 100%.

From the test results above, it can be concluded that in general with indicators of clarity, the impact on students and the feasibility of hypermedia-based tourism English e-modules can be categorized as very good. Based on the results of small group trials or small group evaluations by eight students of the Lampung State Polytechnic Economic and Business Travel Study Program, the electronic module language of hypermedia-based tourism in general was in the very good category, namely; a) The material in the tourism English e-module is in accordance with the learning objectives with a percentage level of 100%, b) The clarity of the instructions and learning steps

in the tourism English e-module is very clear with a percentage level of 87.5% agree and 12.5% disagree. c) The tourism English e-module is easy to use with a percentage rate of 100%. d) Ease of understanding what is learned in the e-module is very easy to understand with a percentage level of 100%, e) Demonstration/practical exercises stimulate student learning experiences that are very in line with the percentage level of 100%, f) Tourism/English speaking practice/practice is sufficient and appropriate with topics with a 100% percentage level, g) Tourism English e-module learning materials are useful and in accordance with 100% percentage levels, h) Test or assessment materials according to learning materials and objectives with a 100% percentage level, i) Test materials in e -The tourism English module measures learning achievement with a percentage level of 100%, j) Feedback from test materials with a percentage level of 100%, k) Student satisfaction using the tourism English e-module with a percentage level of 100%, l) E-language module English tourism is interesting and there is learning fishing (engage) with a percentage level of 100%, m) Students are confident in working on questions l practice/practice and test with a percentage level of 100%, n) Tourism English e-module encourages independent learning, confidence and student learning motivation with a percentage level of 100%, o) Tourism English e-module encourages collaboration between students with a percentage level of 100 %.

Based on the results of the field trial to 30 students, it shows that in general the quality of the tourism English learning module is seen from the aspects of clarity, impact on learners and feasibility was very good where; a) The material in the tourism English e-module is in accordance with the learning objectives with a percentage level of 100%, b) The clarity of the instructions and learning steps in the tourism English e-module with a percentage level of 87.5%, c) The tourism English e-module easy to use very easy to use with a percentage level of 100%, d) Ease of understanding what is learned in e-modules with a percentage level of 100%, d) Demonstration/practice exercises stimulate student learning experience with a percentage level of 100%, e) Language exercises/practices tourism English is sufficient and in accordance with the topic with a 100% percentage level, f) Tourism English e-module learning materials are useful and in accordance with a 100% percentage level, g) Test or assessment materials according to the material and learning objectives with a 100% percentage level, h)) The test material in the tourism English e-module measures learning achievement with a percentage level of 100%, i) Feedback from the test material d ith 100% percentage level, j) Student satisfaction using tourism English e-module with 100% percentage level, k) Tourism English e-module is interesting and there is learning (engage) with 100% percentage level, l) Students are confident in working on practice/practice questions and tests with a percentage level of 100%, n) tourism English e-modules encourage independent learning, confidence and student learning motivation with a percentage level of 100%, m) Tourism English e-modules encourage collaboration between students are very good with a percentage rate of 100%.

Large group trials were conducted on 37 students of the Tourism Travel Study Program, Department of Economics and Business, Lampung State Polytechnic. The effectiveness of the tourism English learning electronic module after the initial test (pretest) and the final test (posttest) was measured by conducting a paired sample test t test. It is known that the results of the calculation are known that the average initial test = 58.02 and the final test = 70.92, the progress value of students or students is 12.865. Based on the output table "Pair Sample Test" shows that the value of Sig. (2-tailed) of $0.000 < 0.05$, it can be concluded that there is a significant difference between the results of the tourism English e-module on the pre-test and post-test data.

5. Conclusion

The overall implementation of research and development of hypermedia-based tourism English learning models can be drawn several conclusions, as follows;

- 1) Developing model of English learning for tourism based on *hypermedia* was intended to give an alternative independence learning resource to improve competences in English for Tourism based on *hypermedia*. The developing of English learning model base on hypermedia applied research and development (R&D) model used a combination of Dick and Carrey model, Hannifinpeck Model and Allen model. These three models has their own characteristics such as very complete and systematic, met with information communication and technology (ICT) software which help researcher in developing the hypermedia based learning model. There were three stages in developing model of English for tourism based on *hypermedia*. Dividing steps in developing learning models into three phases such as conducting needs

- analysis; designing material for learning based on hypermedia and developing learning material and implementation and evaluation have made a good result of designing learning model and much efficiency.
- 2) Validation results from learning design experts, media experts and tourism English materials experts, one-to-one trials by students (one to one learners), small group evaluations, field trials on the acceptability, usability and feasibility of the hypermedia-based tourism English model is overall very good. This means that the model can be used and is feasible for tourism English learning.
 - 3) The results of calculating the effectiveness of the hypermedia-based tourism English learning model, it is known that the average value of the initial test = 58.02 and the final test = 70.92, the progress value of students or students is 12.865, and the results of the output "Pair Sample Test" shows that the value of Sig. (2-tailed) of $0.000 < 0.05$. This means convincingly that the hypermedia-based tourism English learning model for tourism English learning at the Lampung State Polytechnic Travel Study Program has shown real effectiveness in improving tourism English skills.

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