DESIGNING ICT COMPETENCES-INTEGRATED ASSESSMENT INSTRUMENTS OF LISTENING
(DESIGN AND DEVELOPMENT STUDY OF ENGLISH LANGUAGE EDUCATION PROGRAM ASSESSMENT)

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Abstract

The potential of ICT is to have access to the technology that simplify the education The integration of ICT competence into assessment instruments in fact asset to compete what has not yet been covered by the existing assessment instrument's standards in language learning. This research adapted Design and Development Research (DDR). The model of Design and Development Research (DDR) used Richey and Klein (2007) model. The used of DDR stages are analyzing, Designing. Prototype and Evaluation. The design of the ICT competences-integrated assessment instrument of Listening Course through the process of analyzing existing assessment instruments of English Language Study Program from five different universities in Indonesia. An analysis was also conducted the ICT Competences-based English assessment instrument. The result of this research first, found that the ICT competences are mostly integrated in the test instrument components. For the ICT tools in the existing test instrument mostly used computer, laptop, speaker and word processing software. UNESCO competence in the existing test instrument mostly integrated implicitly and explicitly in technology literacy. Second, found the model and procedure of integrating ICT competences into table of specification that commonly used. Third, found the integration of ICT into test instrument component can be applied by infusing the ICT indicator into the table of specification. Fourth, found designing ICT competences-integrated assessment instruments of listening courses used the cloze-test, note taking and multiple choice for the type of listening test instrument.

Keywords : ICT Competences, Assessment Instruments, Listening

In recent years, researchers have become increasingly interested in developing ICT integrated into learning subject. ICT has been referred as the greatest innovation in every aspect of human life. In fact, in the field of education, it is viewed as a reason for the shift in the way learners learn (Hidayati, 2016) ICT has been seen as an instrument for improving students' academic performance, as part of a new pedagogical paradigm in which they must acquire the skills needed by the knowledge community.

ICT and especially the Internet, offer educational tools for children and adolescents, an unprecedented opportunity to respond with the quality needed for increasingly large and diverse demand (UNESCO, 2002). Accessibility to extensive information sources allows students to take an active role in the learning process rather than just relying on the teacher as the only source of knowledge (Newhouse, 2002). The importance of ICT in society emphasized in Activating Our Future that identifies citizens who are ICT literate as a center of economic and social goals, to increase productivity and efficiency, and to build innovative capacity and power competitiveness (UNESCO, 2016). Applying ICT as a tool for learning in the curriculum allows all students to have the opportunity to become competent, discriminatory, creative and productive ICT users. They are better able to achieve curriculum results through effective use of ICT. They develop the knowledge, skills and capacity to choose and use ICTs to ask, develop new understandings, make and communicate with others to participate effectively in society.

Embedding the use of ICTs into the curriculum must be considered a key priority and part of national strategy for learning in an online world by every developing countries of the world including Indonesia. The reason for this is because we live in a technological world where information and communication technologies (ICT) are fundamental to most activities.

Related with the developing and importance of ICT competences integrated learning, assessment is also become the main term of education system. Assessment has always been an integral part of the education landscape. The information from assessments can be used for several purposes with collecting, synthesizing and interpreting information in order to make decision. Depending of decision being made, testing, measurements and evaluation often contribute to the process of assessment (Russel & Airasian, 2012). It provides valuable insights into students' learning and serves as a reference point for their progress. At a broader systemic level, data from assessments provide schools with a better understanding of how entire cohorts are progressing during learning activities.

English is the subject that takes the important role in many developing countries. In Indonesia English take a role as foreign language. As an international language, English spreads all over the world. it can be proved by designing English Curriculum in the whole levels of Indonesian education, from elementary, junior high school, senior high school and finally in University. In teaching learning process of English, students have to master all of the English skills. They consist of speaking, reading, writing, listening. Listening as one of the English basics skills, listening skill is an essential aspects of a development of motivation which empowers students to develop their communication and critical thinking skill necessary for functioning competently in EFL classroom, workplace, home and other place where language learners engage with the public (Motlhaka, 2012).

Listening is one of the subjects studied in the field of language study and in the discipline of conversation analysis. This skill can be improved by practice and there are many rewards to develop your listening skill. It is the active process of receiving and responding to spoken (and sometimes unspoken) messages.

Rivers (1981) states that listening is a creative skill. It means we comprehend the sound falling on our ears, and take the raw material of words, arrangements of words, and the rise and fall the voice, and from this material we create significance. So, we can say that listening is like a cooking process, there is the recipe, and then we gather the ingredients, start to process to cook and finally we eat that. The process will be successful if we prepare the right dose, as well as listening, we can get the right words if we listen well and know all of the sentences. From the definition above, it can be concluded that listening is a complex, active process of interpretation in which listeners match what they have heard with what they have already known. It is a process to start mind. We must pay attention first with the listening,

then we can easily study the other skills.

Using of various ICT tools has found to be motivating learners making them independent in language skills practice because they can practice language out of the classroom also (Yunus, 2009). According to Van Scoter (2002) use of Information and Communication Technologies contributes very effectively to the developing of language skills including listening.

Based on the above explanation, this research was trying to design or develop an ICT competence integrated listening assessment instruments for English language education study program student. For this case, there were three listening courses such as general listening, professional listening, and academic listening. Designing assessment instruments was not a new thing in Indonesia. There were some researchers that already deal with it. One for some of them is Lubis (2018) in his research entitled ICT Integration in 21st-century Indonesian English language teaching: Myths and realities", this research is aimed at addressing the following research question, "How are Indonesian EFL teachers' experiences in ICT integration?" states, first, ICT integration can help the learning more meaningful and interesting, but time allocation and technical problems become the major constraints to conduct a proper integration. Second, most of the respondents have employed technology-based learning media in their English class. However, the benefits of the integration still more on the technical levels including finding related materials and preparing presentation, not the communicative and functional levels for their students' English learning process and progress.

Thus, reflected from the previous findings, it indicated that the concept of ICT integration in Indonesian Curriculum led to positive attitude and perception of the English teachers, yet was not fully viewed positively from the benefits in the actual implementation aimed at students' English learning development and encountered constraints. Therefore, this concept was worth to provide specific formulation synchronized with communicative and functional levels of English language learners. Besides, considering the limitations of that study, it was worth for further studies to investigate more comprehensive data regarding the actual ICT competencies integrated listening assessment instruments to support foreign language learning for ELESP (English Language Education Study Program).

METHOD

Design and Development Research was used as the research design of this study. Design and Development Research Project is based on the concept that the practice of design and development is empirical by nature (Richey, Klein, 2007). Richey and Klein (2009) state that the focus of a design and development study can be on front-end analysis, planning, production and/or evaluation. According to Richey and Klein (2007) the basics of design and development knowledge have six main components. These six components direct the focus on the different elements of the design and development effort: (a) students and how they learn, (b) the context of learning and performance that appears, (c) the nature of the content of learning and how it is sorted, (d) learning strategies and activities implemented, (e) the media and delivery system used, and finally (f) the designer itself and the process they follow. Richey and Klein (2007) stated there are four steps to build and construct research and development, 1) Analyze, 2) Design, 3) Prototype, and 4) evaluate.

In Need Analysis phase, the writer formulating a table of analysis of the ICT competences in the existing listening assessment instruments. The researcher use assessment instruments component provided by brown (2004) and Russell & Airasian, (2012) and ICT competence's indicator based on several sources such as (UNESCO, 2011), (European Union, 2011), (Healey, 2008), (ISTE, 2008) and (Tomei, 2005). Then, the data which is the test instruments analyzed and compared by the table analysis to measure the extent of ICT competences in the

technology literacy, knowledge deepening and knowledge creation frameworks. In this phase the researcher, the writer formulating a table of analysis of the ICT competences in the existing assessment instruments of practical key teaching competences. The researcher use assessment instruments component provided by brown (2004) and Russell & Airasian, (2012).

In designing phase, the findings of the analysis were used to determine the development of the assessment specification. The writer uses the test components in table of analysis to be adapted and infused with ICT competences. The table of specification that have integrated with ICT competences is designed and also the test instruments of listening.

In prototypical phase, the writer develops the prototypical design of the English listening assessment instruments integrated with ICT competences for English language study program. The products are ICT competences integrated table of specification and test instrument of listening. The writer would displaying the test interface that can be use in web based, internet based and online based test. The evaluating proses is the phase to validating the products of assessment instrument by using expert judgement based on (Brown, 2004) principles.

RESULTS AND DISCUSSION

The results of data analysis of ICT competences integrated listening assessment instruments for English Language Education Study Program. Moreover, in this chapter, the five research questions are answered. The sub-questions are answered by using design and development research methods where the researcher analyzed five existing listening assessment instruments from different universities. The researcher also divided every analyzed of existing listening assessment instruments into eight components of assessment instruments and for the listening only using the component of objective test: course information, time allocation, instruction, test format and types, topics, test items, marks and administration of the test. Those eight components of assessment instrument in listening assessment instruments were reconciled subsequently in order to analyze their similarities, differences, and find the gap of those components into ICT competences. Moreover, the ICT competences integrated into listening assessment instruments were also justified by the results of analysis.

Based on the data presentation and the analysis of the ICT competences in the existing assessment instrument. The researcher found that the existing assessment instrument's components make use of ICT on their components except the administration and marks or weighting the test. The ICT competences indicator that can be found on the existing assessment instrument are eight items which are use the search engines in computer devices (UNESCO, 2011; Technology Literacy), Use ICT resources to enhance their productivity (UNESCO, 2011; Technology Literacy), download resources from websites (Healey, 2008; Technology Literacy), engage students in exploring real-world issues and solving authentic problems using digital tools and resources (ISTE, 2008; Knowledge Deepening). There are six items of ICT competences indicator of Technology Literacy used in the existing assessment instrument's components.

On the first components, the researcher found that all the assessment instrument uses the ICT competences use word processing software to write a worksheet and it match with the statement of ICT competence indicator as, Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy) it happens cause all the assessment instrument is written using word processing program and being printed to be delivered.

The second components is time allocation, similar with the first component, the researcher found that all the assessment instrument uses the ICT competences Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy) it happens cause all the assessment instrument

is written using word processing program.

The third component instruction, the ICT competences that appear in this component is Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy)

The fourth components is test format, the ICT competences that appear in this components are Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy) Use the search engines in computer devices, use ICT resources to enhance their productivity, (UNESCO, 2011; Technology Literacy), search for potential teaching material on the internet. (UNESCO, 2011; Technology Literacy). All of the ICT competences in this component are in the level of Technology literacy.

The fifth components is topics. The ICT competences that appear on this component are Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy), use the search engines in computer devices, use ICT resources to enhance their productivity. use presentation software and digital resources to support instruction (UNESCO, 2011; Technology Literacy, search for potential teaching material on the internet (UNESCO, 2011; Technology Literacy), download resources from websites (Healey, 2008; Technology Literacy).

The sixth component is test items, the ICT indicator that the researcher considered to exist in this components is only Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy). So, in conclusion the ICT competences that appear on the Existing Lesson Planning Courses' assessment instrument from Universities C and E are 7 items which consist of Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text and printing (UNESCO, 2011; Technology Literacy), use the search engines in computer devices, use ICT resources to enhance their productivity. use presentation software and digital resources to support instruction (UNESCO, 2011; Technology Literacy, search for potential teaching material on the internet (UNESCO, 2011; Technology Literacy) download resources from websites (Healey, 2008; Technology Literacy), There are seven items of ICT indicator that the researcher consider exist in this components, six of them are in the level of technology literacy and one of them is on knowledge deepening. From the seven items there are 6 items of Technology Literacy.

Based on the data presentation and the analysis of the ICT competences in the existing assessment instrument. The researcher found that the existing assessment instrument's components make use of ICT on their components except the administration and marks or weighting the test. The ICT competences indicator that can be found on the existing assessment instrument are eight items which are use the search engines in computer devices (UNESCO, 2011; Technology Literacy), Use ICT resources to enhance their productivity (UNESCO, 2011; Technology Literacy), download resources from websites (Healey, 2008; Technology Literacy), engage students in exploring real-world issues and solving authentic problems using digital tools and resources (ISTE, 2008; Knowledge Deepening). There are six items of ICT competences indicator of Technology Literacy used in the existing assessment instrument's components.

Table 4.14 The Overall Result of ICT Competences in Assessment Instrument

Listening Course	ICTC	Course information	Time allocation	Instruction	Test format	Topics	Test items	Marks	Administration
Listening for	TL	✔	✔	✔	✔	✔	✔		

General Communication	KD									
	KC									
Listening for Academic Purposes	TL	✔	✔	✔	✔	✔	✔			
	KD									
	KC									
Listening in Professional Context	TL	✔	✔	✔	✔	✔	✔			
	KD									
	KC									

Based on the finding and discussion above, the researcher concludes that the extent of the existing assessment instrument makes use of the ICT competences in extent of technology literacy. Proven by the number of technology literacy used by the components existing assessment instruments.

The table of Specification Model

Determine assessment evidence by identifying how we will know if students have achieved the desired results. In this table of specification, the researcher wanted to integrate the ICT competences based on (UNESCO, 2011a), (European Union, 2011), (Healey, 2008), (ISTE, 2008) and (Tomei, 2005). The integration of the ICT competences descriptors would be chosen inserted into the elements of table of specification. The element of table of specification is based on Carey (1998) which have been stated discussed above. The integration of ICT in the content or the material that covered by the test items can seen as the following table below,

Table 4.15 Integrating Test Components with ICT Competences

Test Components	Integrated ICT Competences
Learning Objectives	Use ICT to search for, manage, analyze, integrate and evaluate information that can be used to support their professional learning.
Description of Test Taker	Use ICT tools to organize and retrieve materials and students' data.
Test Level	CEFR (B1, B2, C1)
Taxonomy	Bloom' taxonomy (Remembering, Understanding, Applying, Analyzing)
Input Sources	• Implement ICT to make the process easier • Use search engines, online databases, and email to find resources.
Topics	• Use available digital devices to achieve teaching goals • Download resources from website • Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
Length	Based on the nature of the course (in the printed or displayed the test must be written and typed using word processing software)
Nature of Content	
Test Method	
Instruction	
No. of Items per Task	
Weighting per	Develop and apply knowledge- and performance-based

Item	rubrics that allow teachers to assess students' understanding of key subject matter concepts, skills, and processes.
Criteria for Marking	Using rubric to help scoring the item based on the difficulty
Administration	• Use any standard Windows/Mac software, including media players. • Create an email account and use it for a sustained series of email correspondence. • Use common communication and collaboration technologies • Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity • Create an appropriate technology environment to meet specific teaching and learning goals.

The design of ICT competences integrated of assessment instrument specifications in this study is adopted from (Taylor, 2014). This design is adopted by considering the practicality of this design in supporting the lectures to create ICT competences integrated assessment instrument for listening course. The test specification in this study is ICT competencies integrated assessment instrument for English undergraduate study program which developed from the CEFR and UNESCO in which the ICT competencies indicator are adapted from.

The purpose of specifications designed in this study is to develop the ICT competence integrated assessment instruments as the need obtained from the need analysis which have been discussed above.

The ICT competences indicators in the table of specifications are taken from each descriptor in CEFR and UNESCO. The course also made from the CEFR level that being adopted by researcher. Text types/ materials/ situation explain the type of the texts, kinds of related materials for example topics and description of the test situation. The test format is using IBT. The course objective is used as the leading point where the assessment instrument that is going to develop based on this specification should aim at. The text level is chosen by the CEFR. The sources of the material from any sources such as book, journal whether it is a physical or digital, the other sources also could be from any online media which can be assessed from search engine by using browser on computer, laptop or smartphone.

The text situation in this specification is expected to give the students chance to elaborate their understanding they have learn regarding to the objective of the course. The cloze test is chosen in addition to emphasizes processes beyond sentence level, in order to reconstruct the text, students should comprehend key ideas and perceive interrelationships within an expanse of continuous discourse. The students are expected to explore more by using such any means of media of ICT. The length of the test is considered by the weight of the item of the test. In cloze test where the test taker is required to use their own synthesis about from what they have got from the teaching and learning activity before the test. The test is expected to measure the level of their achievement regarding to the learning objectives. In order to give score to the students answer the specification is accompanied by the rubrics to help and guide the teacher in scoring.

Based on the table ICT competences integrated it can be seen that the ICT competences which is integrated on the existing assessment instrument from any universities are still low. Therefore, the writer decides to design an assessment instrument test with ICT Competences are integrated in it. The design of ICT competences integrated listening assessment

instrument test can be seen below:

Table 4.16 The ICT Competences Integrated Listening Test

University Data (Logo and information)	Course	: Listening for General Communication
	Course Code	: Campus-101
	Assessment Type	: Mid-Test
	Test Format	: IBT
	Test Type	: Cloze test, MCQ and Match Making
	Lecturer	: (Lecturer's name)
	Credits	: 2 SKS
	Semester	: 1
	Time Allocation	: 45 minutes
INSTRUCTIONS		
1. **Access : https://classroom.google.com/c/MjQ2NjIzMzgyMDVa** 2. **Play the audio and answer the questions** 3. **Listen carefully to the audio delivered** 4. **After you finish the section, press "check" and you will see the correct and wrong answers, and get your result** 5. **Your accumulative score will appear immediately after you finish the last section.**		
GOOD LUCK !		
Scoring Rubric for Cloze Test adapted from PTE Academic (2019)		
Score	**Explanation**	
2,5	Each correct word spelled correctly	
0	Minimum Score	

This test is fulfilling the learning outcomes of listening for general communication by delivering everyday story and by listen to this story the students are expected, *Students able to recognize simple questions and instructions addressed carefully and slowly, Students are able to recognize when people are talking about themselves and their families if they speak very slowly and clearly, using simple words, Students are able to interrelate people if they speak very slowly and clearly about simple everyday topics. Students are able to understand words and short sentences, provided that people speak very slowly and very clearly.*

The ICT competences integrated in the most lack of assessment components in finding from each university. The instruction and administering the test. Both of the components have the important roles to make an appropriate test instrument. The writer tends to upgrading the eight component of test instrument to make the most and very upgradable of ICT competences that is administering the test. After designing the test, the writer fulfilling the ICT competences there are; Use ICT to search for, manage, analyze, integrate and evaluate information that can be used to support their professional learning. Use ICT tools to organize and retrieve materials and students' data. Implement ICT to make the process easier. Use search engines, online databases, and email to find resources. Use available digital devices to achieve teaching goals. Download resources from website. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching. Use word processing software to write a worksheet following standard convention Develop and apply knowledge- and performance-based rubrics

that allow teachers to assess students' understanding of key subject matter concepts, skills, and processes. Use any standard Windows/Mac software, including media players. Create an email account and use it for a sustained series of email correspondence. Use common communication and collaboration technologies. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity. Create an appropriate technology environment to meet specific teaching and learning goals.

CONCLUSION

The first phase of this research is need analysis where the writer analyses the existing English listening test assessment instruments from five universities in mid-test and final test format. The writer also divided every analysed of existing listening assessment instruments into eight components of assessment instruments and for the listening only using the component of objective test: course information, time allocation, instruction, test format and types, topics, test items, marks and administration of the test. Those eight components of assessment instrument in listening assessment instruments were reconciled subsequently in order to analyse their similarities, differences, and find the gap of those components into ICT competences. During the analysis, the writer found that the ICT competences which is integrated on the existing assessment instrument is not fully integrating the ICT competences within each component. Therefore, the writer decides to design the table of specification and instrument of listening test to make high coverage of ICT competencies integrated. the use of ICT competences are still as a tool which use hardware such as computer, laptop and printer as well as software such as Windows/Mac and Microsoft Word by using features on them such as page layout, margins, table, font type and size, numbering, space and grammar checker. The ICT competences indicators that mostly used on the existing assessment instruments is *using word processing software to write a worksheet, following standard conventions* (UNESCO, 2011; Technology Literacy). The second is *using ICT resources to enhance their productivity.* (UNESCO, 2011; Technology Literacy) and the last is *download resources from websites* (Healey, 2008; Technology Literacy).

Second, in creating an ideal table of specification it is a must to consider the nature of the course, course objectives and skill to be covered which can be obtained from the existing syllabus and theory from scholar. After that the elements of the table of specification should be decided based on the underlying theory. The components of table of specification is adapted from (Taylor, 2014), (Brown, 2003) and (Russell & Airasian, 2012) which consist of learning objectives, description of test taker, test level, taxonomy, input sources, topics, time allocation, nature of content, test format, instruction, test items, scoring, and administration and finally the ICT competences indicators are integrated within each components of the table of specification.

Third, based on the analysis that shows the extent of the existing assessment instrument made use of ICT competences and procedure of designing table of specification, the ICT competences-integrated table of specifications were designed by using the components of table of specification described by scholars (Taylor, 2014), and (Brown, 2003). ICT competences infused in components of table of specification were on learning objective, input sources, topics, nature of content, and administration.

Fourth, based on the table of specification the ICT competences-integrated assessment instrument test is designed to fulfil the gap found on the analysing phase. The ICT competences-Integrated assessment instrument use ICT competences in 3 level namely: Technology Literacy, Knowledge Deepening and Knowledge Creation. In order to design ICT competences integrated test, the test components were adapted from by (Brown, 2003) and

(Russell & Airasian, 2012) which infusing ICT competences by ICT competency framework by UNESCO.

Fifth, based on the table of specification the ICT competences-integrated assessment instrument non-test is designed to fulfil the gap found on the analysing phase. In designing ICT competences integrated non-test was also adapted by components of test described by (Taylor, 2014), and (Brown, 2003). which infusing ICT competences by ICT competency framework by UNESCO. The ICT competences-Integrated assessment instrument use ICT competences in 3 level namely: Technology Literacy, Knowledge Deepening and Knowledge Creation.

REFERENCES

Airasian, P.W., and Russell, M.K. (2008). Classroom assessment: Concepts and applications (6th ed.). New York: McGraw-Hill

Akem, J.A., and Agbe.N.N. (2003). Rudimens of Measurement and Evaluation in Education Psychology Makurdi: The Return press.

Australian National Training Authority (ANTA). (2002) Assessment and online teaching: Australian flexible learning quick guide series.Availableat:http://www.flexiblelearning.net.au/guides/assess ment.pdf (Accessed: 8 November 2017).

Anderson, L. W. (2003). Classroom Assessment; Enhancing the Quality of Teacher Decision Making.

Barbosa, H., and Garcia, F. (2005). Importance of online assessment in the E-learning process. ITHET 2005: 6th International Conference on Information Technology Based Higher Education and Training, 2005, 2005(August). https://doi.org/10.1109/ITHET.2005.1560287

Brown, H. D. (2004). Language Assessment principles and classroom practies.

Chouthaiwale, S. S., and Alkamel, M. A. A. (2018). The positive Effect of ICT on the English Language Learning and Teaching The positive Effect of ICT on the English Language Learning and Teaching, (December).

Drigas, A., and Charami, F. (2014). ICTs in English Learning and Teaching, (November). https://doi.org/10.3991/ijes.v2i4.4016

Ellis, T. J., and Levy, Y. (2010). A Guide for Novice Researchers : Design and Development Research Methods What Design and Development Research Is −.

Fives, H., and DiDonato-Barnes, N. (2013). Classroom test construction: The power of a table of specifications. Practical Assessment, Research &, (February 2013).

Hidayati, T. (2016). Integrating ICT in English Language Teaching and Learning in Indonesia, 38–62.

Kahl, S. R., Hofman, P., and Bryant, S. (2013). Assessment Literacy Standards and Performance Measures for Teacher Candidates and Practicing Teachers, (August 2012).

Kementerian Pendidikan Tinggi. (2014). Buku kurikulum pendidikan tinggi.

Kumar, S., & Tammelin, M. (2008). Integrating Ict Into Language Learning Guide for Institutions.

Marina. (2015). Information And Communication Technology (Ict) And Its Role In Educational Assessment, 3(1), 23–37.

Motlhaka, H. A. (2012). Developing ESL Listening : Promoting Student Motivation. Indiana University of Pennsylvania.

Newhouse, P. (2002). The IMPACT of ICT on learning and teaching.

O'Malley, J. M., and Pierce, L. valdez. (1996). Assessment For English Language Learners: Practical Approaches For Teachers.

OECD (Organisation for Economic Co-operation and Development). (2011). PISA 2009 Results: PISA 2009 Results: Students On Line, Digital Technologies and Performance. PISA 2009 Results: PISA 2009 Results: Students On Line, Digital Technologies and Performance (Vol. VI).

Profesional Testing Inc (PTI). (2006). Create the Test Specifications Components of the Test Specifications. Test, 1–3.

Queensland Curriculum and Assessment Authority. (2015). Designing effective assessment instruments for Authority and Authority-registered subjects, (January).

Ratheeswari, K. (2018). Information Communication Technology in Education, 3, 45–47.

Richards, J. C. (2015). Technology in language teaching today. Indonesian Journal of English Language Teaching, 10(1), 18–32.

Rivers, w. m. (1981). Teaching Foreign-Language Skills.

Russel, M. K., & Airasian, P. W. (2012). Classroom Assessment concepts and applications.

Sandrock, P. (2002). Planning Curriculum for Learning World Languages. Wisconsin Department of Public Instruction.

Schools, A. C. F. O. R., Of, P., and Development, T. (n.d.). Information And Communication Technology In Education.

UNESCO. (2008). Strategy Framework for Promoting ICT Literacy in the Asia-Paci c Region Strategy Framework for Promoting ICT Literacy in the Asia-Paci c Region.

UNESCO. (2016). A Model for obtaining ICT indicators in education; Working papers on education policy; Vol.:3; 2016.

Vandergrift, L., and Goh, C. C. M. (2012). Teaching and Learning Second Language Listening.