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DESIGNING ICT COMPETENCES-INTEGRATED LANGUAGE AWARENESS (ENGLISH PHONETICS AND PHONOLOGY, ENGLISH MORPHOLOGY AND SYNTAX, AND ENGLISH SOCIOPRAGMATIC) ASSESSMENT INSTRUMENTS FOR ELESP

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Abstract

The purpose of this research was to design ICT competences-integrated Language Awareness (English Phonetics and Phonology, English Morphology and Syntax, and English Socio-pragmatic) assessment instruments for English Language Education Study Program (ELESP). The Design and Development Research (DDR) accommodates this research to produce the models and principles guided by the design, development, and evaluation processes. The data of this research are final test of assessment instruments from five Universities existing assessment instruments of English Language Education Study Program, UNESCO document, European Profiling Grid (EPG) document, and Common European Framework of Reference (CEFR). The researcher conducts three phases: need analysis, where the writer analyses the existing assessment instruments of five universities and compare them to ICT competences of EPG, information gathering, and prototypical design. The findings shows the ICT competences of five universities on Technology Literacy of UNESCO. The research results are the procedures to design Table of Specification (ToS), the design ICT competences-integrated in Table of Specification, and design ICT competences-integrated in test and non-test of Language Awareness assessment instruments.

Keywords: Assessment instruments, ICT competences, Table of Specification, and Language Awareness.

Information and Communication Technology (ICT) is indispensable to human society. Information and Communication Technologies (ICTs) are referred to as the varied collection of technological gear and resources which are made use of to communicate. Its integration in schools or universities is essential in order to achieve various objectives, as well as to improve the quality of lessons. Thus, all schools have to be equipped with the necessary ICT tools in order to provide the next generations with the needed tools and resources to access, use and attain the expected skills for a modern society.

Education is the first and best key area for ICT applications. The use of different information communication technologies has become inevitable for students in learning. Teachers are a vital link in the education chain, and for education to truly respond to the needs of 21st century, they must play a central role in leveraging technology, and in particular, using new and old

ICT devices in teaching and learning. Oliver (as cited in Danner, 2013) asserts that the use of ICT in higher education enhances student-centered learning. Within higher education, one of the major teaching challenges.

The challenge that our educational systems are encountering is how to transform the curriculum and teaching-learning process to provide students with the requisite skills to function effectively in a dynamic and continuously changing environment. ICT provides powerful tools that may help in transforming the present isolated, teacher-centered, and text-bound classrooms into rich, student-focused interactive knowledge environments. ICT should be integrated into education to support instruction and assessment processes. Specifically, in relation to assessment, ICT are used to support assessment practice in various ways. Computers can be used as the medium for testing, to score students' tests using automatic scoring software and as a tool for doing assessment tasks. According to Jonassen (as cited in Marina, 2015) states that the use of technology to support assessment is not only done by converting traditional forms of assessment into a digital format, such as computer-based testing, quizzes or surveys, but it can also be used to assess higher-order learning outcomes.

Assessments are part of teaching and learning process in the classroom. In general, assessments are methods used to gather information about students' knowledge, ability, understanding, attitudes and motivation. Assessment can be used to measure students' abilities in English Language Awareness, which is communicative competences. The courses of English Language Awareness in this research, such as : English Phonetics and Phonology, English Morphology and Syntax, and English Sociopragmatic.

Assessment instruments are the subject of discussion in the syllabus, which the assessment instrument is the part that is always needed in the syllabi. There are number of syllabi that only mentions assessments but do not explicit indicate assessment instruments and there are several syllabi clearly mentioning the assessment instrument. Moreover, European Profiling Grid (EPG) explicitly mentions that assessment instrument is the importance things in the syllabi.

The research focuses on designing ICT competences-integrated Language Awareness assessment instruments for English Language Education Study Program. The design itself uses three different frameworks, UNESCO ICT Competency Framework, European Profiling Grid (EPG), and Common European Framework of Reference (CEFR) which cannot be seen in English Language Education Study Program assessment instruments in Indonesia.

There are two previous studies dealing with technology based Language Awareness assessment instruments. First study, entitled "Comparing Student Assessments and Perceptions of Online and Face-to-Face Versions of an Introductory Linguistics Course" conducted by David M. Johnson & Chris C. Palmer (2015). This previous study aimed to examines the issue of whether linguistics is better suited for a face-to-face (F2F) environment than an online teaching environment. The finding of this study showed that problematize the notion that linguistics (and perhaps other disciplines) is equally suited for an online and F2F environment since students fare better academically and engage more with the F2F linguistics course. And students with higher GPAs gravitate toward F2F classes. Regarding the course itself, convenience is the primary category that students consistently noted as a reason for selecting the online linguistics course versus its F2F counterpart. Even so, results do show some effectiveness in treating linguistic content online.

The second previous study entitled "Exploring the Validity of a Second Language Intercultural Pragmatics Assessment Tool" conducted by Veronika Timpe-laughlin & Ikkyu Choi (2017). This previous study aimed to explores validation evidence for a test of receptive L2 pragmatic ability called the American English Sociopragmatic Comprehension Test (AESCT), which is a Web-based assessment consisting of 54 tasks measuring knowledge of speech acts,

routine formulae, and culture-dependent lexical differences. The finding of this study showed that the AESCT is sufficiently reliable. Overall, learners were found to perform as previous research suggests: sociopragmatic knowledge was related to L2 exposure and L2 proficiency. Descriptive statistics, correlation analyses, and linear regression were used to analyze aspects of construct validity. And The AESCT is intended to be used as a learning-oriented assessment in university-level applied linguistics classes. ICT competences-integrated Language Awareness assessment instruments in the existing research still concern with online assessment with linguistics course and assessment validity with pragmatic ability. Research on ICT competences-integrated Language Awareness assessment instrument is still limited, it is necessary to design ICT competences-integrated Language Awareness assessment instrument.

METHODS

The purpose of this research is to design ICT competences-integrated Language Awareness (English Phonetics and Phonology, English Morphology and Syntax, and English Socio-pragmatic) assessment instruments for English Language Education Study Program.

According to Creswell (2012) that qualitative research is a form of interpretive inquiry in which researchers make an interpretation of what they see, hear and understand. Creswell (2012) also stated that in qualitative research, researchers become a key instrument because qualitative researchers collect data themselves through examining documents, observing behavior, or interviewing participants.

The research applied design and development research (DDR), because the objective of this research is to design the product. According to Nunamaker et al (as cited in Ellis & Levy, 2010) they define DDR as a bridging function in the research cycle. Moreover, this framework of DDR begins with the initial conceptualization of a problem and culminates in evaluation of the impact of one or more artifacts on ameliorating that problem. In other words, DDR focuses on building that bridging artifact that can serve to strengthen the interaction in the conceptualization and evaluation cycle. And identified five major milestones: a) construct the conceptual framework; b) develop the system architecture; c) analyze and design the system; d) build a prototype; and e) test and evaluate the prototype.

This research has the characteristic of Design and Development Research (DDR) which adapted from six steps made by Ellis & Levy into five phases, including some modification. The five phases of research, such as; identify the problem, described the objectives, design prototype, focus and group discussion, and design revision. The following table shows the design and activities has been used by the researcher:

Table 1 Research Method

Phase/ Step	Research Method	Activity
Identify the problem	Content analysis	Analyzing the existing assessment instruments of English Language Education Study Program.
Describe the objectives	Content analysis	Describing the objectives of ICT competences-integrated into Language Awareness from the research questions.
Design	Model building	Designing the ICT competences-integrated into Language Awareness assessment instrument for English Language Education Study Program.

Discussion	Expert review	Validating the ICT competences-integrated into Language Awareness assessment instrument by expert.
Design revision	Model Revision	Revising the ICT competences-integrated into Language Awareness assessment instrument.

The data analysis procedures follow the five phases of the design research. For the first phase, identify the problem. In this step the researcher identified the problem that found from the existing assessment instruments, where there are some assessment instruments which had not covered ICT competences. The ICT competences-integrated in assessment instruments become the main focus on the research. The second phase, described the objectives. Describe the objectives of ICT competences-integrated Language Awareness from the research questions. The third phase is design prototype. Design the ICT competences-integrated Language Awareness assessment instrument for English Language Education Study Program. In designing the ICT competences-integrated Language Awareness assessment instrument, the research followed some steps, 1) Preliminary research, which the researcher did a library research to gather, compare, and analyze the theories. 2) Collected the data source in a form of existing assessment instrument from five universities of English Language Education Study Program, 3) Analyzed the data, to analyzed data used table unit analysis. 4) Design the ICT competences-integrated into Language Awareness assessment instrument. The fourth phase, focus and group discussion. Emphasis on the experts review toward the design assessment instrument and the analysis on whether improvements are needed to the developed Language Awareness assessment instrument before it is finally used in practical contexts. The focus grup discussion used item analysis to validate the instruments. The fifth phase, design revision. In this phase, revising is necessarily required. It means that the researcher will have to recheck whether or not the coverage of the descriptors are sufficient.

RESULTS AND DISCUSSION

The results and discussion show by analyzing the data. The data collected from UNESCO standard related to ICT competences, EPG descriptors, CEFR standard, and existing final test of assessment instruments of English Language Education Study Program from five different universities in Indonesia. In the end, the results of the data analysis are used to design ICT competences-integrated assessment instruments of Language Awareness (English Phonetics and Phonology, English Morphology and Syntax and English Socio-pragmatics) for English Language Education Study Program in Indonesia.

Based on research results and discussion, can be conclude as follow; First, analysis components assessment instruments in existing Language Awareness assessment instruments. The existing assessment instruments of final test collected from University A, B, C, D and E are classroom based. All the assessment instruments from five universities followed the test components assessment instruments, such as; Institution identity, Subject name and credit, Lecturer or Test developer, Time allocation, Day and date of Exam, Semester, Instruction, and test item. The test instruction components of the fifth universities are clear, succinct, and unambiguous. The test items of the test covered all the materials that taught in classroom.

Second, ICT competences-integrated in the existing Language Awareness assessment instruments from five universities in Indonesia shows do not cover the whole ICT competence of EPG phase and UNESCO level. In university A covers three phases of EPG, such as; 1.1.1, 1.1.3 (for novice teacher), 2.1.2 (for experienced teacher) and ICT competence of UNESCO in level Technology Literacy. In university B covers two phases, such as; 1.1.1 (for novice teacher), 2.1.2 (for experienced teacher) and ICT competence of UNESCO in level Technology Literacy. In university C covers two phases, such as; 1.1.1 (for novice teacher), 2.1.2 (for experienced teacher) and ICT competence of UNESCO in level Technology Literacy. In university D covers two phases,

such as; 1.1.1 (for novice teacher), 2.1.2 (for experienced teacher) and ICT competence of UNESCO in level Technology Literacy. In university E covers two phases, such as; 1.1.1 (for novice teacher), 2.1.2 (for experienced teacher) and ICT competence of UNESCO in level Technology Literacy.

The result of analysis found that existing assessment instruments from five universities in Indonesia in terms of ICT competences covered in EPG phases 1.1 until 2.1 and the level competences on technology literacy of UNESCO standard, which is the ability to use word-processing software to type the test, able to download resources from internet in term to search the IPA symbols from internet, and ability to use common hardware such as printing. As acquired of ICT competences of EPG descriptors and UNESCO that ICT competences on assessment instruments should on level 2.2 of EPG descriptors and level Knowledge Deepening and knowledge Creation of UNESCO standard, the existing assessment instruments not covered yet.

Designing ICT competences-integrated Language Awareness assessment instruments will design products such as procedures to design ICT Competences-integrated in the Table of Specification (ToS), design ICT Competences-integrated Table of Specification (ToS) Language Awareness assessment instruments, and design ICT Competences-integrated Test and Non-test Assessment Instruments.

First is The Procedures to Design ICT Competences-integrated in the Table of Specification (ToS). In developing table of specifications, there are some components that have to be considered by the researcher: 1) Objectives; 2) materials; 3) type of question; 4) assessment cognitive level; 5) curriculum specification; 6) section and part; 7) time allocation; 8) number of items; and 9) mark allocation.

Procedures for designing ICT competences-integrated in the table specification such as; 1) Prepare the table format specifications and materials that will be used as a source. 2) Determine the basic competencies and indicators of learning. 3) Determine the subject matter and sub-topics which will be used to measure the achievement of learning indicators. 4) Determine the number of items that should be asked in the test. 5) Distribute the number of items per subject matter. 6) Distribute the number of items per subject matter into the sub-topics. 7) Distribute the number of items per sub-subject to the cognitive level column and the section/number of the item. 8) Develop the table of specification. 9) Provide description of course name, credit, semester, time allocation. Thus, ICT competences can be integrated into the assessment instrument components such as; Instruction, Test format and type, Test Item, Administration components.

Second, design ICT Competences-integrated Table of Specification (ToS) Language Awareness assessment instruments. In design of Table of Specifications, there are some components that have to be considered by the researcher: 1) Section and part; 2) Objectives; 3) Materials; 4) Curriculum specification; 5) Assessment cognitive level; 6) Type of assessment; 7) Number of items; 8) Mark allocation; 9) Time allocation; 10) Scoring rubric. The researcher used some rubrics to evaluate the quality of students. Presentation, report, written tests are used analytical type of rubric which is the score depends on criterion fulfilled. The ICT competences in the Table of Specification of these three courses; English Phonetics and Phonology, English Morphology and Syntax, and English Socio-pragmatic in term of objective and subjective test integration on question type element, which are used computer based.

Third is design ICT Competences-integrated Test and Non test Assessment Instruments. To integrate ICT competences into test assessment instruments of assessing competences should relates to possible and suitable type of test of English Phonetics and Phonology, English Morphology and Syntax, and English Sociopragmatic. There are many type of test which are suitable to assess these three courses. However, to integrate ICT competences into test also should match every test and material used. The suitable tests to assess these three courses are essays, multiple choice, cloze,

written open ended and completion task. For non-test, the suitable tests to assess these three courses are oral presentation, report, observation, interview and portfolio.

To integrate these type of test and non-test into ICT competences of UNESCO and EPG, this classroom test based can be tested by using computer and online test as tools in taking the test. The possible ICT in a test is computer with its features such as application for education; google Podcast, Google classroom, Edmodo, Moodle, Padlet. These applications are available on computer and smartphone.

The types of ICT competences-integrated test and non-test, the students are able to use the search engines in computer devices, able to identify the Internet and the World Wide Web, elaborate on their usages, able to implement the several ICT resources for online reading, able to use ICT resources to support teachers' own acquisition of subject matter and pedagogical knowledge, such as Digital classroom, able to use ICT resources to enhance their productivity, such as Digital classroom platforms, able to use presentation software and digital resources to support instruction, such as : PPT, able to recognize the basic function of graphics software and use the software package to create a simple graphic display, such as: PPT, able to demonstrate the basic tasks and use word processors, such as: micosoft office, text entry, editing text, formatting text, able to distinguish the use of ICT resources for individuals and small groups of students in the regular classroom, such as Digital classroom platforms (Google classroom, Edmodo, Moodle, Padlet), able to collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation, able to prepare instructional materials for students using basic technology tools (e.g., word-processing software, presentation software, and software that creates Internet resources), able to design units of study and classroom activities that integrate a range of ICT tools and devices to help students acquire the skills of reasoning, planning, reflective learning, knowledge building and communication and able to help students to use ICT to develop communications and collaboration skills. These competences covered the knowledge deepening and knowledge creation of UNESCO standard.

CONCLUSION

The ICT competences found that existing assessment instruments from five universities in Indonesia in terms of ICT competences covered in EPG phases 1.1 until 2.1 and the level competences on technology literacy of UNESCO standard, which is the ability to use word-processing software to type the test, able to download resources from internet in term to search the IPA symbols from internet, and ability to use common hardware such as printing. The existing assessment instruments require revision in terms of the standard competences, instruments that used, and the using ICT in assessment instruments. Assessment instruments should use the standard competences and Table of Specification to design assessment instruments in order to avoid the incompleteness of learning outcomes.

Moreover, designing procedures ICT competences-integrated in the Table of Specification of Language Awareness assessment instruments of English Language Education Study Program, ICT competences can be integrated into the subject matter used and as a tool to test students' knowledges and abilities and there are ten components and nine procedures to design ICT competence-integrated in the Table of Specification (ToS) of Language Awareness assessment instruments of English Language Education Study program.

To designing ICT competences-integrated the tables of specification of Language Awareness found that ICT competences-integrated on teaching and learning process and as tools to support assessment instruments test and non-test.

Designing ICT competence integrated test and non-test of English Phonetics and Phonology, English Morphology and Syntax and English Sociopragmatic assessment instruments. The suitable

tests to assess these three courses are essays, multiple choice, cloze, written open ended and completion task and for non-tests to assess these three courses are oral presentation, report, observation, interview and portfolio. The ICT competences of EPG descriptors and UNESCO that ICT competences on assessment instruments on level 1.1 until 2.2 of EPG descriptors and level Knowledge Deepening and knowledge Creation of UNESCO standard.

Hopefully there are other studies on ICT competences-integrated Language Awareness assessment instruments and this research can be a model for undergraduate English Language Education Study Program in Indonesia.

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