English Linguistics Terms Based on Android Application (Terminography for English and Literature Students)

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ABSTRACT

This research discussed about Applied Linguistics in Terminography theory by Temmerman (2013). This research discussed about Applied Linguistics in Terminology theory by Temmerman 2013. This objective of the research are 1) to find out English and Literature students' challenges in learning linguistics terminologies, and 2) to reveal the effectiveness of ELITE (English Linguistics Terminology), an Android application developed by the researcher, in addressing English and Literature students' needs in learning linguistics terminologies at the English and Literature Department. The theory divided into five principles in making a specialized dictionary, in this case is Linguistics terminology. This research used corpus collection instrument by collecting data from several references. The finding showed that the Linguistics application was built based on the five principles of Terminography; (1) Monolingual, it uses English language as the user target for English literature students; (2) Structure Consecutively, there are 711 corpus collection words in linguistics terminology, they are set consecutively from A to Z initials; (3) Standard Description, corpus collection based on the Linguistics dictionary book of Cambridge university press 2013; (4) One design, the application provides a term and its definition; (5) Permanently; each term and its definition as well as the application are permanent used for Android user. Based on the result, the application could prove the theory of Temmerman about Terminography in its five principles, and it can be implemented to English Literature students.

1. Introduction

A mobile phone has been transformed into a smartphone in the twenty-first century, such as an Android, which allows users to access information rapidly. Since it was created by Google Inc in 2005, Android has wide range of applications (Omer et al., 2021). There were 2.633.211 applications in the Google Play Store as of December 2018 (Statista Inc. 2018). The result is a lot of people, especially Indonesians, adopt Android as their smartphone because of so many applications accessible.

According to Boellstorff et al., (2013), from 2014 to 2016, Indonesia rose to become the third-most populous nation in Asia-Pacific for Android users. In the context of English and literature, this is also accurate. Based on data from observation sheets, 25 pupils in the classes of 2014, 2015, 2016, and 2017 are solely Android users. The aforementioned figures are expected to rise annually as more and more applications become available through the Google Play store.

Despite the fact that there are thousands of Android applications, the researcher's findings indicate that there aren't any explicitly targeted the concept of linguistics terminology at the students. 80% of the students in the English and Literature Department utilize textbooks to study linguistics, according to data from need assessments. Yet, 72% of them said that linguistics is one of the challenging courses with some challenging terminology. Many people, according to Finch and Finch (2003), are unfamiliar with linguistic terms. In reality, the only application that the students will come across is "language learning".

Also, Temmerman Terminography Theory, one of the theories in Applied Linguistics, will be used to design the product (2007, p. 20). For instance, Yudi Hanafi's 2016 study, "Music Dictionary Development Based on Android," applied the Sugiya (2017) model method from 2013 and used research and development techniques. Based on need analyses of Music Department students at Yogyakarta State University's Language and Art Faculty, his research...
resulted in an Android application. He discovered that one flaw in music dictionary books is that they are excessively hefty for students to carry around in their backpacks.

The researcher proposes ELITE application based on Android, for students in the English and Literature Department. The application was created by using the Terminography theory to present an original idea to understand linguistic terminologies for the student. The application would be created using the Research and Development technique and will serve as the end result.

This research aims to develop the Android app ELITE (English Linguistics Terminology) in order to help students learn linguistics terminologies at the English and Literature Department. It also determines how effectively ELITE (English Linguistics Terminology) in addressing these students' needs.

Linguistics is the science of language or scientific investigation of language (Rahman et al., 2021). Popularly, it is said that Linguistics is the science of language or knowledge that makes language its object of study. Studying Linguistics is very important, because language is the main means of communication for every human being (Wedo et al., 2021; Andini et al., 2022).

Literature is an expression of human expression in the form of written or oral works based on thoughts, opinions, experiences, and feelings (Rahman & Amir, 2019; Prihandoko et al., 2019). Literature deals with the description of works using words and sentences arranged in such a way (Rahman, 2018). Literary works are works that are usually written in beautiful and orderly language (Amir P. et al., 2023). For example poetry, prose, drama, and others.

2. Methodology

There are various models for conducting research and development method. But this research used Research and Development (R&D) method from Richey and Klein’s (2013) model—which consists of design, development, and evaluation—would be used by the researcher (also called DDE).

a. Design

Design was a preliminary task to produce a product design that the researcher would develop. Needs analysis in small-scale study on the difficulty of teaching linguistics terminology to English and literature students would be the first step in the design process (Richey and Klein: 2013).

b. Development

Development was an intermediate action in which the researcher created a product using the design conclusions drawn from the data of the needs assessment. Based on the Design stage, the researcher created an Android application with linguistics as its foundation. The results of the pupils' needs in this instance support Temmerman's theory of terminography (2007).

c. Evaluation

The final step in testing a product that a researcher had created was evaluation. In order to determine the application's efficacy, the researcher would test the application on students of English and Literature Department. To measure the effectiveness and test the students' ability to utilize it, the evaluation will employ the five components of the System Usability Scale (SUS) (Farrell & Nielsen, 2013, p. 22).

Using Microsoft Excel 2016, the researcher would randomly select 30 samples of the students. Name code would appear in Column A, while "Rand Formula" would appear in Column B. As a last step, the researcher would select 30 samples of the students and modify each sample to correspond to a certain number on the attendance list of the students.

In order to determine how well the Android application works for teaching linguistics terms, the researcher would also use quantitative method of the SUS to analyze the data from the questionnaire. According to Brooke (2013), measuring percentile and indicating a range of scale agreements from "very usable" to "very unusable" were the best ways to determine the effectiveness of a mobile application through a SUS questionnaire.

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>85%-100%</td>
<td>Very usable</td>
</tr>
</tbody>
</table>
3. Result and Discussion

a. Design

The needs assessment phase of the design stage was initiated by conducting mini research on the difficulties students faced when acquiring linguistics terms. The results of this stage are broken down into two categories; First, Information about the needs assessment for e-learning; Second, The difficulty students have understanding linguistics terminology.

Elements of Needs Assessment for E-Learning

Azimi (2014, p. 11–22) split the assessment of students’ needs for electronic learning into a number of categories to identify any potential issues. 25 students at the University in Makassar who study English and literature are solely Android users. 80% of them, however, resorted to regularly adopting printing books for their linguistics studies because there aren’t any teaching materials that specifically cover the topic of linguistics terminology. In contrast, 72% of them said that linguistics is one of the challenging courses with some challenging terminology. As a result, the researcher takes an approach to the components of Azimi’s study, "E-Learning Needs Assessment among Students in the Colleges of Education" (2014).

<table>
<thead>
<tr>
<th>Elements of E-Learning Need Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject of the Study</td>
<td>Linguistics is a difficult subject. 72%</td>
</tr>
<tr>
<td>Instructional media</td>
<td>Picture and Video 20%</td>
</tr>
<tr>
<td>Text</td>
<td>Printing book or e-book 80%</td>
</tr>
<tr>
<td>Tablets, iPods, Smartphone Android</td>
<td>User of Android 100%</td>
</tr>
</tbody>
</table>

The students of the English and Literary department in Makassar are now clearly at risk for problems, as shown by Table 2. As a result, the researcher made an effort to offer a remedy to the issue. Yet, the researcher should be aware of the students' struggle with learning linguistics terms to explain the concept.

Students' Difficulties Learning Terms in Linguistics

In accordance with the above preliminary findings, the researcher verified the information by discussing with the five students to learn about their difficulties in mastering linguistics terms. Accordingly, some students have difficulty acquiring linguistics terms. The researcher matched the challenge data from the students to the needs data for linguistics terminology learning from the students. Here are several lists of the students to pursue their needs.

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>Discussion Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What kinds of application development?</td>
<td>Android device</td>
</tr>
</tbody>
</table>
2. Theme display on the application?
  Minus Color
  Full color
  
  3. Features of the application?
  Searching
  Terminology Lists
  Definition of term
  IPA
  Audio
  
  4. Language
  Monolingual-English
  
  5. Additional Link
  Official link to the Department

b. Development

The Android platform was chosen for the ELITE application's design since 25 of the students' data were 100% Android users. Also, four of the five people who participated in the interviews prefer installing an Android device. Another one, who enjoys reading traditional media, has chosen to produce a book on linguistics terminology. As a result, the researcher decided to build the ELITE Application on the Android platform.

On the basis of the results of the need assessments, the researcher created the ELITE application. The researcher then approaches Temmerman's (2007, p. 20) Terminography theory to create a terminology dictionary, confirming the application. He claims that in order to create a dictionary of terms for a particular topic, researchers need to be aware of five principles. In this instance, it is the guidelines for building a dictionary of linguistic terms. Below are the five guiding concepts that the ELITE application confirms.

Figure 1. ELITE Application Display

Monolingual

The terminology component of the ELITE application only displays terms and definitions in English. English is used in both the first and second features, "English Linguistics Phonology". As a result, all linguistics terminology, definitions, and supporting images in the ELITE application are in one language.

English is related to the majority of the students' need. Three students selected English as was selected in monolingual, while two more selected in bilingual, English and Indonesia. Nonetheless, multilingual dictionaries for particular use are infrequently available (almost never).
Structure Consecutively

The ELITE application's database terms are listed successively based on the corpus data. When a user selects the "Terminology" feature, it is visible. Afterwards, the terms list will appear in order from A to Z in the ELITE application. Also, the user can just call the term by putting it in the "search" field or scrolling down the lists.

Standard Description

All linguistics terminologies are ideally described in a standard definition from an appropriate book based on the corpus data of the ELITE application. The preliminary electronic book "The Cambridge Dictionary of Linguistics" by Brown and Miller is approached by the researcher in 2013 published. The researcher has compiled 711 terminologies that are important for the students to master.

The One Design

One phrase for one definition can be chosen using the ELITE program. When the students click "one term" on the application, it is shown a definition of the term. The user's scrolled or written information will then display in the ELITE program along with one definition.

Permanent

The ELITE application was created to have the term's definition appear consistently. It would not alter through time, in other words. When a user clicks "one term" on the terminology page, it is shown. The user's scrolled or written information will then display in the ELITE program along with one definition. Every phrase and definition is shown permanently so long as the researcher continues updating them.

Evaluation

SUS (System Usability Scale) scores range from "Strongly Disagree" to "Strongly Agree," indicating a spectrum of usable and unusable agreement (Brooke, 2013, p. 29-40).

<table>
<thead>
<tr>
<th>NO.</th>
<th>Statements of System Usability Scale</th>
<th>Score</th>
<th>Mean</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I believe that I would want to frequently use the ELITE to master linguistics terms.</td>
<td>133</td>
<td>4.43</td>
<td>High</td>
</tr>
<tr>
<td>2.</td>
<td>This ELITE application was more difficult than it really needed to be, in my opinion.</td>
<td>107</td>
<td>3.56</td>
<td>Moderate</td>
</tr>
<tr>
<td>3.</td>
<td>I found the ELITE application to be user-friendly for learning linguistics terms.</td>
<td>130</td>
<td>4.33</td>
<td>High</td>
</tr>
<tr>
<td>4.</td>
<td>I believe I will require assistance in order to use the ELITE application.</td>
<td>97</td>
<td>3.23</td>
<td>Moderate</td>
</tr>
<tr>
<td>5.</td>
<td>The ELITE app's integration of linguistics concepts and meanings impressed me.</td>
<td>128</td>
<td>4.26</td>
<td>High</td>
</tr>
<tr>
<td>6.</td>
<td>I believed that the ELITE application contained numerous inconsistent terminology and concepts.</td>
<td>107</td>
<td>3.56</td>
<td>Moderate</td>
</tr>
<tr>
<td>7.</td>
<td>I believed that using the ELITE program to learn linguistic terms was difficult.</td>
<td>118</td>
<td>3.93</td>
<td>High</td>
</tr>
<tr>
<td>8.</td>
<td>I suppose that the majority of English and literature students would rapidly pick up linguistics terms in order to use the ELITE program.</td>
<td>128</td>
<td>4.26</td>
<td>High</td>
</tr>
</tbody>
</table>
According to Brooke (2013, pp. 29–40), measuring percentile and indicating a range of scale agreements from "extremely usable" to "very useless" are the best ways to determine the success of a mobile application through a SUS questionnaire. The researcher points out that all of System Usability Scale components; Learnability, Efficiency and Satisfaction through evaluation diagram result and the scale agreement; from very usable to very unusable.

Table 5. Level in ELITE Application

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspects of System Usability Scale</th>
<th>Mean Scale</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Efficiency</td>
<td>3.68</td>
<td>High</td>
</tr>
<tr>
<td>2.</td>
<td>Satisfaction</td>
<td>3.81</td>
<td>High</td>
</tr>
<tr>
<td>3.</td>
<td>Learnability</td>
<td>4.10</td>
<td>High</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3.86</td>
<td>High Score of ELITE Application</td>
</tr>
</tbody>
</table>

4. Conclusion

This study discovered a design for an Android application based on the challenges that students faced; there are 25 students at Makassar University’s in English and Literature program who only utilize Android devices. 80% of the students, however, resorted to regularly use the conventional book for their linguistics studies because there are not any teaching materials that specifically cover the topic of linguistics terminology. In contrast, 72% of them said that linguistics is one of the challenging courses with some challenging terminology. The ELITE application was created using a research and development process that was tailored to the needs of the students and supported terminography theory. ELITE application effectiveness is broken down into three categories based on evaluation data: Learnability was 82%, which is good for picking up linguistics vocabulary. An effectiveness of 73% was attained, which is sufficient for usage for studying linguistics terms. The 76% satisfaction rate was pleasant for students in English and Literature Department to employ when learning linguistics terms.

References


