CHAPTER III RESEARCH METHODOLOGY

3.1 Research Design

This research design is intended to develop a product. The intended product from this research is an ELT model that can promote gender awareness of the university students through the problem they are trying to solve. To achieve the goal, Educational Research and Development method, or the so called R & D model was used here.

The R & D procedures would cover both qualitative and quantitative approaches. The use of these approaches is meant to develop, refined, and validated a product in education and teaching (Gay, 1992: 10, Borg and Gall, 1979: 624 and Gall, Gall, & Borg, 2003:569). Instead of testing a new theory or theories, these approaches are intended to bridge the gap between pure and applied research results on the one hand with the interest of educational praxis on the other side.

The Educational R & D model that was used here is the one proposed by Borg & Gall (1989).Ten steps are included in this version of the R & D cycle. The steps are, as follows: (1) Research and information collecting, (2) Planning, (3) Developing preliminary form product, (4) Preliminary field testing, (5) Main product revision, (6) Main field testing, (7) Operational product revision, (8) Operational field testing, (9) Final revision product, (10) Dissemination and implementation.

In this study however, the researcher did not employ all the ten steps offered. Instead, she did only nine of them. This is due to the rigorous nature of R & D research and the available resources that the researcher had. In line with this, Borg dan Gall (1989) said:

If you plan to do an R & D project for a thesis or dissertation, you should keep these cautions in mind. It is best to undertake a small-scale project NASHRIYAH, 2018 DEVELOPING GENDER PERSPECTIVE-BASED ENGLISH LANGUAGE LEARNING MODEL: AN ATTEMPT TO PROMOTE CHARACTER EDUCATION IN UIN AR-RANIRY ACEH (An R & D Study) Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu that involves a limited amount of original instructional design. Also, unless you have substantial financial resources, you will need to avoid expensive instructional media such as film and synchronized slidetape. Another way to scale down the project is to limit development to just a few steps of the R & D cycle (Borg & Gall, 1989: 798).

Furthermore, the design and development workflow learning model used in this study referred to the five stages design developed by Plomp (1997). However, due to practical situation and context, this research was only up to four of the five stages, namely: 1) the initial assessment stage; 2) design stage; 3) the realization phase (construction); and 4) the stage of testing, evaluation, and revision.

Based on the aforementioned model, the researcher designed Gender Perspective-Based English Language Learning Model (GPBELLM/The Model) as follows:

3.1.1 Initial Assessment Phase

This first step investigation was to identify the factual process of English Course II teaching at Language Development Center of UIN Ar-Raniry. The results of this investigation would be taken into consideration in developing gender inclusion English language learning model. The investigation was carried out by gathering the information about the problems that might exist in the English Course II teaching. These initial investigation activities were carried out by the following steps:

1) Analyzing basic problems

This was to analyze the factual process of English Course II teaching, i.e. the problems and obstacles faced, strategies, methods, approaches, materials, media, learning resources, and so forth used by lecturers in learning. To gain data for this investigation, several class observations were carried out, interviewing several teachers was done and textbook analysis was conducted.

2) Analyzing students (pre-service teachers)

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This was to analyze students' needs and students' competency. The English Course II the student had earlier served as the basis for developing this teaching learning model. The target of this investigation was the students of English Department having passed English Course II. The data from them were obtained through distributing questionnaires.

3) Analyzing teaching material

This was intended to select and decide the materials relevant to the development of intended gender awareness competency. The materials then were specified and arranged systematically.

4) Literature study and document analysis

These were done to compile and study the theories underlying the concepts related to the PBL approach, desired gender awareness competencies and the results of previous researches relevant to the development of gender awareness competency.

The results of this initial investigation would then be taken into consideration in developing Gender Perspective-Based English Language Learning Model (The Model) to promote the gender awareness competency of the students of English Department of UIN Ar-Raniry.

3.1.2 Design Phase

In this phase, the components of character based English language teaching model were designed. They included the syntax of the model and the outcome expected, the lesson plan covering the steps of the lesson, the teaching materials, students' worksheets, students' response and observation checklist.

3.1.3 The Realization Phase (Construction)

This stage was a follow-up activity of the design phase. In this stage, the initial prototype covering all the teaching instruments was reexamined in order that it was ready for being validated by the experts.

3.1.4 Testing, evaluation, and revision phase.

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This phase included two main activities, namely (1) validity activity and (2) field test activity.

1) Validity Activity

Validity activity was done to gain the feasibility assessment of the teaching model from relevant experts. For this activity, two different field experts were involved. The expert in the field of ELT was asked to see theextent to which the teaching model was feasible to be implemented in the English language classes. Meanwhile, the experts in the field of gender were asked to see the extent to which the teaching model was effective to promote gender awareness.

2) Field-test Activity

This field test activity was done to see the practicality and effectiveness of Gender Perspective-Based English Language Learning Model (The Model) in the implementation. The field test activity in this study was done using rolling plan system. Rolling plan as stated in <u>http://business-finance.blurtit.com/294282/what-is-rolling-plan</u>, is "a plan which is prescribed to run for a certain period of time, and during that time, adjustments and changes can be made to that plan." Thus, doing field test using rolling plan system means that the field test was done and was updated regularly for the same period. The updated version then was field tested to another class. And in this study there were three classed participated in the rolling plan field test activity.

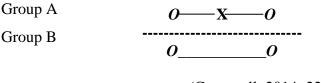
Using this rolling plan system in this study was not without a reason. The research used it because of its flexibility. A rolling plan allows a great deal of flexibility and control over the model that the researcher was trying to execute. In addition, rolling plans were constantly improving upon themselves, as the changes made to the plan were usually made to benefit the students. Furthermore, instead of waiting for a long term plan to expire in order to take advantage of the next big thing, the researcher took benefit of it straight away when rolling plan absorbing it (http://business-finance.blurtit.com/294282/what-is-rolling-plan.)

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The data used in this study to create this Gender Perspective-Based English Language Learning Model (The Model)were obtained through mixed method research. It is "an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks" (Cresswell, 2013:32). This approach was chosen because the problems examined require more comprehensive disclosure, which reveals a variety of factors related to the implementation of the development model of Gender Perspective-Based English Language Learning Model (The Model) to increase students' gender awareness while learning English. Using this form of inquiry would provide a more complete understanding of a research problem than either approach alone.

The model created was based on a needs analysis covering activities like classes observation, lecturers' interview, document analysis, combined with literature review, further validated by expert judgments to get the model ready to be tested. In the development of this is done with the involvement of two experts, and the expert's second opinion will be analyzed through the technique gregory.

The effectiveness of the model was tested by using the procedure of quasi experiment. The procedure was chosen since the sample of this study was a convenience sample; the one naturally formed groups (Creswell, 2014: 215). More specifically, the form of quasi experiment used was None quivalent (Pre-test and Post-test) Control-Group Design. In this design, the investigator used two groups; one group for the experimental group A and the other group for the control group B. Both groups took a pre-test and post-test. In this design, only the experimental group received the treatment (Creswell, 2014: 220).



Note : (Cresswell, 2014: 220)

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 $X = Treatment; O = \dots$

The quasi experiment for field test activity in this study involved three classes for experimental groups and two classes for control groups. The classes were chosen for their parallel learning achievement.

The data analysis for this inquiry was conducted by using statistical tests of significance on the differences of average value between the control group and the experimental group with SPSS 17.0.

3.2. Research Procedure

As aforementioned, this research used *Research and Development Approach* (R & D) developed by Borg & Gall (1989). This kind of research needs a series of long process, starting from a preliminary analysis up to test effectiveness. This research was carried out with the following stages:

- Preliminary study for need analysis was the first stage to do. It was to identify the factual process of English Course II teaching at Language Development Center of UIN Ar-Raniry. The investigation was carried out by gathering the information about the problems that might exist in the English Course II teaching covering analysis activities on students, teachers, and teaching materials. Literature study and document analysis were done to gather and study relevant theories.
- 2) Developing the draft of Gender Perspective-Based English Language Learning Model (The Model) to promote students' awareness competencies by designing (1) Lesson Plans containing the steps of teaching and learning process in The Model, (2) teaching material related to gender issues, (3) Student Worksheet, (4) assessments to measure students' gender awareness competence, (5) students' learning activities, and lecturer's response to the learning instruments.
- Examining the validity of early prototype of The Model as the result of model design. All the learning instruments were validated by two experts

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from two different fields of studies (English and Gender) to see the aspects of its theoretical rationality and construction consistency.

- 4) After being validated by the experts, the early prototype The Model was evaluated and revised based on the recommendations and feedbacks from the experts. The result of the activity was a validated model draft.
- 5) Field test activity.
 - (1) After being validated, the model draft would be field tested. However, beforehand, the investigator was in coordination with relevant parties, in this case the lecturer and students who would be involved in this study. There were five classes involved in this field test activity. Two classes were for control group and three classes for experimental group (Class A, B and C). The lecturers whose classes were treated as experimental groups were invited to be the observers.
 - (2) Before the field test was done, the investigator beforehand conducted an orientation of the model to teachers who would become the observers in research. The orientation was done by discussing the implementation of the overall model.
 - (3) The field test was done directly by the investigator and as having mentioned, the field test was done by using rolling plan system. According to the validated model, there were four executive meetings to do. In this study, the investigator firstly implemented the model in Class A. Since using rolling plan system, the evaluation and revision were done directly after the meeting. The revised model then was field tested in Class B. The same case applied in Class B; when the meeting was over, the evaluation and revision were to do and revised model was then applied in Class. The result of the revision in Class became the final product of this study.

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- (4) To see the development of gender awareness character, the investigator administered the designed questionnaire before and after the application of the model, precisely at the first and the last meetings.
- (5) Meanwhile for the two control classes, the executors of the class were the lecturers in charge. They taught the students with conventional teaching model. What I mean by conventional teaching model here is the non The Model. The two classes were observed by the investigator directly. The designed questionnaire was also administered to these groups before and after the treatment to see the development of gender awareness character using conventional teaching model.

3.3 Research Setting, Research Object and Research Subjects

The object of the study is the focus becoming the main interest of a research, the one coming to be the target to achieve in a research. Meanwhile the subject of the research is one or more persons becoming the information sources to gain data about an opinion or to uncover facts in the field (Arikunto, 2006, p. 145). Research setting is the site in which the research is conducted.

3.3.1 Research Setting

This section briefly discribes the research settings. They are UIN Ar-Raniry, English Language Study Program and Language Development Center. This is important to do to understand the research environment. To start with, we will first discuss about UIN Ar-Raniry.

UIN Ar-Raniry is a name of a state Islamic university in Aceh. The name of Ar-Raniry was originated from the name of Syeikh Nuruddin Ar-Raniry, a well-known Acehnese Islamic scholarwho once contributed much in developing Islamic thought in South East Asia living in 1637-1641. It is located in Ar-Raniry Kopelma Darussalam (Lingkar Kampus) Street - Banda Aceh. Founded on October 5th, 1963 (Nurdin, et al., 2010) under the authority of Ministry of Religious Affairs, this higher education institution has a mandate to prepare

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citizens to have an integrated understanding of general and religious knowledge. In Aceh, this Islamic university is widely believed to have a long historical background in spreading Islamic teaching in Aceh (Redaksi, 2008).

UIN Ar-Raniry has nine faculties (2014/2015 UIN Academic handbook), and one of them is The Faculty of Education and Teacher Training. English Language Study Program becoming the research setting in this study is one of the twelve study programs in the said faculty. This present study program is specialized in teaching learning English. It has 50 lecturers which consist of 32 permanent lecturers and the rest of them are part-time ones. The majority of them are overseas graduates.

The vision of the English Education Department is to be an excellent institution that produces the graduates who are qualified, competitive, creative, innovative, pious and able to give positive contribution to others, and also to make this department as a superior and innovative English training center that attaches to Islamic principles and values.

The mission of the English Education Department is to improve the quality of English in Aceh in particular and in Indonesia in general by:

- Educating its students to be future English teachers who are qualified, innovative, independent, professional, pious and Taqwa.
- Producing English teachers who are ready to compete and able to develop their ability then gives positive contribution to develop their country or continue their studies to the higher level.
- Developing the practical, applicable and modern methods for the English Education department (Tim Revisi/ Buku Panduan Akademik, 2010/2011, p. 66).

Language Development Center or the so called LDC is an independent institution established by UIN Ar-Raniry which has a duty to carry out development, guidance in the field of language in UIN Ar-Raniry. Its vision is

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to 'become an effective center of learning a foreign languange for developing thoughts, insights, and knowledge'. Meanwhile, its missions are:

- To povide Indonesian and other foreign language trainings to all students and academicians of UIN Ar-Raniry.
- To develop knowledge of foreign languages and their teaching methodologies through multi research approaches.
- To perform various community services and religious deployments by means of mastering foreign language. (Tim Revisi/ Buku Panduan Akademik, 2010/2011).

It is the institution that organizes English Course as one of general courses to provide in UIN Ar-Raniry.

3.3.2 Research Object

The object of this study was Gender Perspective-Based English Language Learning Model (The Model), an English Language Teaching Model developed to raise the gender awareness of English departments students, pre-service English teachers studying in Tarbiyah and Teacher Training Faculty of UIN Ar-Raniry.

The development of the teaching model was meant to address to the students of English program students of UIN Ar-Raniry in order to raise their gender awareness. The gender issues raised were obtained from the results of FGD with gender specialists during preliminary study. Those issues were then incorporated in the lesson plan as teaching materials. The design after successfully being validated was then implemented and evaluated during the field test phase.

3.3.3 Research Subjects

In this study, there are six groups of students becoming the research subjects. One group was for preliminary study phase and five groups consisting two groups for control classes and three groups for experimental classes were subjects for small scale field test phase.

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1) Research subjects during preliminary study

The subjects during this stage are English Department students who were actively taking English courses during the first term of 2013/14 having already joined English courses II before. The data expected to gain from them were their level of gender awareness after having successfully passed English Course II by using commonly employed teaching material and learning strategy at the institution.

The technique used to collect the data from them was by administrating questionniare to them with the help of their lecturers in charge.

2) Research subjects during model implementation

The subjects involved during this stage are English Department students who were taking English Course II during the second term of 2013/2014. The instrument used to gain data from these present subjects is the same instrument used for subjects during preliminary study. While the data from the subjects during preliminary study were used for need assessment, the data gained from the subjects during field test stage were used to determine the effectiveness of the model developed.

3.4 Variable and Variable Operational Definition

In this study, the variables investigated were (1) Gender Perspective-Based English Language Learning Model (The Model) and (2) gender awareness character. The Model as the model to be implemented in this study, was an intermediate (intervening, control, moderating) variable. The model was designed and developed with the construction that students learned gender issues in order to promote their gender awareness through English language they were learning. The development was done by using Problem-Based Learning model raising issues about gender. Meanwhile, the target variable was the character of students' gender awareness in ELT.

For the clarity, here is the definition of the concepts used in this study:

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Gender awareness is the main key to promote gender equity and equality. Using the indicators for good character by Lickona, this study developed the indicators for gender awareness character into three aspects, namely (1) moral knowing (knowledge/cognitive), (2) moral feeling (attitude/affective), and (3) moral acting (behavior/ psychomotoric).

What follows is the operational variable of gender awareness character in this study.

No.	Output/ Aspect	Indicator Instrument	Scale
1	Moral knowing/C ognitive	 Knowledge about the concept of gender Knowledge about the forms of gender discrimination Knowledge about causes of gender discrimination and institution of gender socialization (gendering) Knowledge about government regulation related to gender equity and equality Self-rate and Likert scale questionnaire 	Nominal
2	Moral feeling/ Affective	 Appreciation of the importance of knowing about the concept of gender Appreciation of the importance of knowing about the forms of gender discrimination Appreciation of the importance of knowing about causes of gender discrimination and institution of gender socialization (gendering) Appreciation of the importance of knowing about causes of gender discrimination and institution of gender socialization (gendering) Appreciation of the importance of knowing about government 	Nominal

 Table 3.1 Variable Indicators of Gender Awareness Character

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			regulation related gender equity and equality		
3	Moral acting/Psyc	1.	Avoiding using insensitive gender languages like chairman, office boy, etc.	Self-rate and Likert scale questionnaire	Nominal
	homotoric	2.	Using sensitive gender languages like <i>chairperson</i> instead of <i>chairman</i> .	1	
		3.	Creating an advertisement using sensitive gender languages.		
		4.	Actively participating as a gender equality and equity activities		
		5.	Actively becoming a focal point, the one who always sounds the importance of gender equality and equity		

Source: Developed from the indicators for good character by Lickona.

3.5 Data Collection Techniques

As having mentioned, this study employed mixed method research. This suggest that the investigation involved both quantitative and qualitative research data collection techniques. The followings are the data collection techniques used during the investigation:

3.5.1 Observation

Observation is a type of self-report meant"to observe the behavior and social and material environment of the individuals being studied" (Gall, Gall, & Borg, 2003: p.254). This study used this technique twice, namely during initial assessment and field test activity. During the initial assessment, there were seven English Course II classes observed. The observations were done by the investigator herself. The observation activities were meant to see the objective condition of English Course II teaching learning process, especially to see to what extent the teaching learning process contained bias activities. The data were then used as the basis for doing this research. Meanwhile, during the field test phase,

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there were three classes. The observed classes were the classes treated as experimental group. The observers of the classes were recruited from the teachers in charge. The observation activities were done to find support data related teaching learning process and learning outcome covering the activities done by the investigator and students in the learning process using Model. The data gained from these activities were used to evaluate and revise the teaching model.

3.5.2 Interview

Interview is "oral questions asked by the interviewer and oral responses by the research participants" (p. 222). This technique was also employed during the initial phase. Interviews were conducted with seven lecturers in charge teaching English Course II whose classes were observed. The interviews conducted after their teaching learning activities. These were intended to find more detail data about what they had done in the class.

3.5.3 Content analysis of record

Content analysis is "a research technique for the objective systematic, and quantitative description of the manisfest content of communication" (278). This technique is best used to "study written communication in natural situations" (p. 282).In this study, the technique was utilized to analyze English Course II textbook in order to examine the teaching materials taught. The data used from this textbook analysis were used to develop teaching material for Model

3.5.4 Questionnaire

Questionnairesare "documents that ask the same questions of all individuals in the sample" (p. 222) in which the respondents write their responses at their conveience. There are a number of reasons for choosing questionnaires as the instrument to collect data. They are easy to administer and quick to give and provide a general assessment of the research subjects. They are thus the most costeffective model of strategy assessment. Under conditions of confidentiality, questionnaires are nearly completely non-threatening when being administered

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using paper and pencil (or computer)'. The same reasons became the grounds why this study used questionnaire as the main technique to collect data.

There were three kinds of questionnaire used in this study. They are (a) questionnaire to survey students' experience, (b) questionnaire for students' response after the application of Model, and (c) questionnaire for character measurement.

1) Questionnaire to survey students' experience

This questionnaire was administered during preliminary study to the students who had joined English Course II before. This was meant to find data from them about what they had experienced during taking English Course II. The data from this activity were used as need assessment, as basis for the development of Model.

2) Questionnaire for students' response after the application of Model

This questionnaire was administered during the field test phase. This was intended to find their responses about the application of the Modelto what extent they benefited from the application.

3) Questionnaire for gender awareness measurement

This last questionnaire was the main instrument of this study. This was administered to students three times, namely during preliminary study, before the application of the Model and after the application of the Model. During preliminary, the questionnaire was administered to those who had taken English Course II. This was intended to find data about the level of gender awareness of the students who had taken English Course II. Like data from observation, data from this survey were considered whether or not to continue this research. Furthermore, the same questionnaire was administered to the experimental groups before and after the Model was executed. These last data were the main data for this research

The questionnaire designed to elicit students' gender awareness were self made one. The questionnaire used in the current study consisted three sections.

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Section I was aimed at obtaining the information about subjects' personal details. The data gathered are student age, GPA, parents' educational backgrounds and their occupations. Section II was for gaining students' gender perspective. It consists of 17 gender stereotyped beliefs statements widely spread in the society. Section III consisting of three aspects (knowledge, attitude and behavior) was intended for obtaining students' gender awareness. The questionnaire for knowledge aspect consists of 19 gender issues important to know. The questionnaire for attitude aspect consists of 19 gender issues important to learn. Finally, the questionnaire for behavior aspect consists of 20 items important to do or avoid.

The following is a description of all of the questions:

Section	Topic	Type of information	Number of item(s)
		needed	
Ι	Personal details	Personal backgrounds	
II	Perspective	Gender Perspective	17 questions
III	Gender	A. Knowledge	19 questions
	Awareness	B. Attitude	17 questions
		C. Behavior	20 Uestions

 Table 3.2 Description of the questionnaire

3.6 Research Instrument Development

The instrument was developed to measure the development of the character of gender awareness through the implementation of the Model. In developing the instrument, the first things to do was testing its validity and realibility.

3.6.1 Validity Test

Validity indicates the extent to which a measuring instrument can measure what it wants to measure. In simply words, validity shows accuracy. So we can say that the higher the validity of a measuring instrument, the better the measuring device is in showing what it should measure. Therefore the aim of testing the NASHRIYAH, 2018

validity of this questionnaire is to see the extent to which the questionnaire can be used as a right measuring tool elicit students' gender awareness.

The preparation of the main instrument in this study was conducted through three stages of validity. Firstly the instrument was validated through expert judgement. Several experts in the field of gender who were also practitioners in the field of education were invited to see whether the items in the instrument relevant to the goal of developing a model that would be implemented. Once the questions were considered relevant, then the instrument was read by two students who were invited to see to which the instrument was understandable. After making some revisions from the feedback given by the experts and the students, the validity of the instrument was then filed tested by involving 46 students to fill in the instrument.

After the data gained, then the validity of the instrument was analyzed by using Pearson's Product moment Correlation with SPSS for Windows version 17. The validity test was carried out through the following stages:

- 1) Determining the hypothesis for the test results.
 - Ho The score of indicator point is positively correlated with the factor scores (total).
 - H1 The score of indicator point is positively correlated with the factor scores (total).
- 2) Determining r table

Seeing r table with a significant level of 5% or 1%.

- 3) Looking for r count
- 4) Comparing the count r and r count table
 - If r count > r table, then Ho is accepted and H1 is rejected, meaning that the scores of indicator item are positively correlated with factor scores (total)

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- (2) If r count < r table, then Ho is rejected and H1 is accepted, meaning that the scores of indicator item are not positively correlated with factor scores (total)
- 5) Making decision

If r count is positive and > r table, then the item is valid.

If r count is negative and or < r table, then the item is not valid.

What follows are the results of the instrument validity analyzed using Pearson's Product moment Correlation with SPSS for Windows version 17.

Table 3.3
Validity Test Result of Gender Awareness Instrument
for Cognitive Aspect

No.	Item	Rcount	Rtabel	Note
1	Item 1	0.523**	0.2907	Valid
2	Item 2	0.345*	0.2907	Valid
3	Item 3	0.478**	0.2907	Valid
4	Item 4	0.557**	0.2907	Valid
5	Item 5	0.594**	0.2907	Valid
6	Item 6	0.773**	0.2907	Valid
7	Item 7	0.763**	0.2907	Valid
8	Item 8	0.647**	0.2907	Valid
9	Item 9	0.874**	0.2907	Valid
10	Item 10	0.850**	0.2907	Valid
11	Item 11	0.629**	0.2907	Valid
12	Item 12	0.771**	0.2907	Valid
13	Item 13	0.797**	0.2907	Valid
14	Item 14	0.822**	0.2907	Valid
15	Item 15	0.854**	0.2907	Valid
16	Item 16	0.843**	0.2907	Valid

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17	Item 17	0.643**	0.2907	Valid
18	Item 18	0.740**	0.2907	Valid
19	Item 19	0.844**	0.2907	Valid

*Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed)

	for Affective Aspect					
No.	Item	Rcount	Rtabel	Note		
1	Item 1	0.669**	0.2907	Valid		
2	Item 2	0.715**	0.2907	Valid		
3	Item 3	0.729**	0.2907	Valid		
4	Item 4	0.734**	0.2907	Valid		
5	Item 5	0.832**	0.2907	Valid		
6	Item 6	0.581**	0.2907	Valid		
7	Item 7	0.681**	0.2907	Valid		
8	Item 8	0.624**	0.2907	Valid		
9	Item 9	0.650**	0.2907	Valid		
10	Item 10	0.781**	0.2907	Valid		
11	Item 11	0.811**	0.2907	Valid		
12	Item 12	0.845**	0.2907	Valid		
13	Item 13	0.665**	0.2907	Valid		
14	Item 14	0.794**	0.2907	Valid		
15	Item 15	0.768**	0.2907	Valid		
16	Item 16	0.832**	0.2907	Valid		
17	Item 17	0.849**	0.2907	Valid		
18	Item 18	0.845**	0.2907	Valid		
19	Item 19	0.862**	0.2907	Valid		
		•				

Table 3.4 Validity Test Result of Gender Awareness Instrument for Affective Aspect

*Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed))

Table 3.5
Validity Test Result of Gender Awareness Instrument
for Psychomotoric Aspect

No.	Item	Rcount	R table	Note
1	Item 1	0.598**	0.2907	Valid
2	Item 2	0.682**	0.2907	Valid

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3	Item 3	0.533**	0.2907	Valid
4	Item 4	0.547**	0.2907	Valid
5	Item 5	0.606**	0.2907	Valid
6	Item 6	0.761**	0.2907	Valid
7	Item 7	0.644**	0.2907	Valid
8	Item 8	0.735**	0.2907	Valid
9	Item 9	0.373*	0.2907	Valid
10	Item 10	0.418**	0.2907	Valid
11	Item 11	0.566**	0.2907	Valid
12	Item 12	0.636**	0.2907	Valid
13	Item 13	0.596**	0.2907	Valid
14	Item 14	0.370*	0.2907	Valid
15	Item 15	0.274	0.2907	Not Valid
16	Item 16	0.543**	0.2907	Valid
17	Item 17	0.503**	0.2907	Valid
18	Item 18	0.370*	0.2907	Valid
19	Item 19	-0.172	0.2907	Not Valid
20	Item 20	-0.066**	0.2907	Not Valid
21	Item 21	0.200	0.2907	Not Valid
22	Item 22	0.407**	0.2907	Valid
23	Item 23	0. 600**	0.2907	Valid
L			1	

*Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Table 3.6
Validity Test Result of Gender Awareness Instrument
for Gender Perspective

No.	Item	Rcount	Rtable	Note
1	Item 1	0.262	0.2907	Not Valid
2	Item 2	0.503**	0.2907	Valid

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3	Item 3	0.403**	0.2907	Valid
4	Item 4	0.386**	0.2907	Valid
5	Item 5	0.473**	0.2907	Valid
6	Item 6	0.487**	0.2907	Valid
7	Item 7	0.605**	0.2907	Valid
8	Item 8	0.459**	0.2907	Valid
9	Item 9	0.318*	0.2907	Valid
10	Item 10	0.285	0.2907	Not Valid
11	Item 11	0.464**	0.2907	Valid
12	Item 12	0.567**	0.2907	Valid
13	Item 13	0.431**	0.2907	Valid
14	Item 14	0.272	0.2907	Not Valid
15	Item 15	0.064	0.2907	Not Valid
16	Item 16	0.413**	0.2907	Valid
17	Item 17	0.472**	0.2907	Valid
18	Item 18	0.326*	0.2907	Valid
19	Item 19	0.279	0.2907	Not Valid
20	Item 20	0.359*	0.2907	Valid
21	Item 21	0.264	0.2907	Not Valid
22	Item 22	0.389**	0.2907	Valid
23	Item 23	0. 143	0.2907	Not Valid
24	Item 24	0. 397**	0.2907	Valid

*Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed)

As can be seen from the four tables above, the majority of the items are valid, so they can be used in the research instrument. However, there are four items from Psychomotor Aspect and seven items from Gender Perspective Aspect that are invalid. Since the abscence of those invalid items from the instrument did

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not bring any effect whatsoever on the goal of the investigation, this study then excluded the eleven item from the instrument.

3.6.2 Reliability Test

Reliability test aims to get the consitency of the instrument. Reliability may also indicate that an instrument is trustworthy enough to be used as a data collector. Reliable instrument will produce reliable data anyway.

The reliability of the instruments used in this study was analyzed by using Cronbach's Alpha with SPSS for Windows version 17.

The following is the guideline to determine the realibility of the instrument used in this study:

If alpha > 0.90 then the reliability is very high

If alpha between 0.70 - 0.90 then the reliability is high

If alpha between 0.50 - 0.70 then the reliability is moderate

If alpha < 0.50 then the reliability is low (Hilton, 2004, p. 364)

What follows is the result of the research instrumen realibility analysis by using Cronbach's Alpha with SPSS for Windows version 17.

Tabel 3.7

Instrumen Realibility Analysis by Using Cronbach's Alpha with SPSS for Windows Version 17

No.	Variable	Rcount	Rtabel	Note
1	Instrument for Cognitive	0.941	0.2907	Very high
	Aspect			reliability
2	Instrument for Affective	0.955	0.2907	Very high
	Aspect			reliability
3	Instrument for Psychomotor	0.869	0.2907	High
	Aspect			reliability
4	Instrument for Gender	0.772	0.2907	High
	Perspective Aspect			reliability

As the results showed in table 3.7, overall Cronbach's alphas for the four aspects indicate a high to very high level of reliability and consistency. High level reliability was respectively gained by Gender Perspective aspect (0.772) and Psychomotor aspect (0.869). Meanwhile, the two others, namely Cognitive aspect (0.941) and Affective aspect (0.955) gained a very high level of internal NASHRIYAH, 2018

consistency. From these results we may conclude that the four instruments can be good instruments.

3.7 Data Analysis Method

Based on the data acquired, there are two techniques of data analysis used, namely descriptive analysis and statistical analysis.

3.7.1 Descriptive Analysis

Descriptive analysis techniques are used to analyze qualitative data. The purpose of this analysis is to describe variables or conditions that exist in a given situation. Descriptive analysis is usually not to test the hypothesis. The analysis procedure of descriptive data in this study was carried out all along during the study from the beginning to the end. While the emphasis at the beginning of the study was to collect data, the one at the end of the study was to analyze the data.

3.7.2 Statistical Analysis

This analysis is used to analyze quantitative data. Particularly in this study it was used to test the effectiveness of the results of the data models developed. This analysis was done by comparing the experimental approach of the average value of the experimental group with the control group, and a comparison between the situation before and after the treatment.

The analysis of the effectiveness of this model used paired samples t tests processed with SPSS 17.0 to analyze the average difference before and after treatment in experimental class and control class with the following hypotheses:

- a. H_0 : The average value is the same before and after treatment.
- b. H_1 : The average value differs between before and after treatment.

In taking the decision, it is stipulated that:

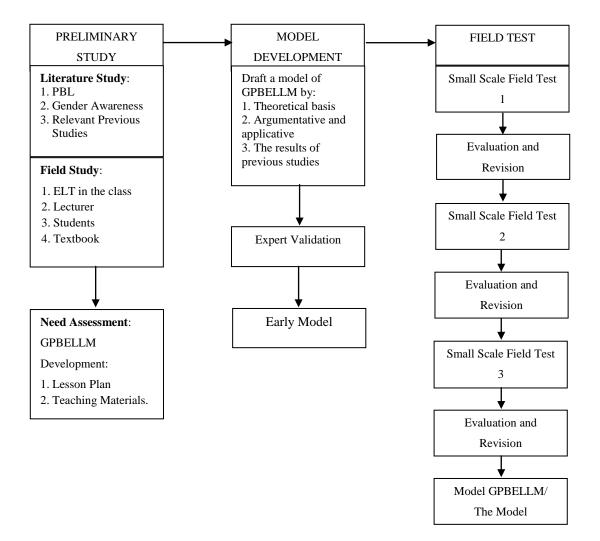
- a. If the probability ≥ 0.05 then H_1 is not accepted because the average is the same.
- b. If the probability ≤ 0.05 then H_0 is rejected since the average is different. And before it was tested, there should be precondition test such as data

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normality test and homogeneity data test. Normality test is meant to see the extent to which data are normally distributed. Homogeneity test is carried out to show that the group of sample data comes from the populations having the same variations.

3.8 Research Flow

Overall the procedures of this research can be seen in the following figure:



3.1 Flow Chart of GPBELLM(The Model) Research and Development

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