## **CHAPTER II**

# **REVIEW OF LITERATURE**

#### A. LANGUAGE TEACHING

To define language is really difficult no matters how careful all features are considered. It seems impossible to formulate the definition without dividing it into smaller parts of characteristics. A consolidation of possible definition of language division can be seen the following composite definition.<sup>1</sup>

- 1. Language is systematic
- 2. Language is a set of arbitrary symbols.
- 3. Those symbols are primarily vocal, but may be also visual.
- 4. The symbols have conventionalized meanings to which they refer.
- 5. Language is used for communication.
- 6. Language operates in a speech community or culture.
- 7. Language is essentially human, although possibly not limited to humans.
- 8. Language is acquired by all people in much same way; language and language learning both have universal characteristics.

So, "what is language teaching?". Language teaching is both art and science. "It is highly skilled activity that can be learned by careful observation and patient practice. However, language is a science". Linguistics is the main source science branch of language teaching. Linguistics provides a growing

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<sup>&</sup>lt;sup>1</sup> Brown, Douglas. 2000. Page: 5-6

<sup>2</sup> Damirel, O. 1992. ELT methodology. Ankarna: Usem. Page: 1

scientific knowledge about language which can guide the activity of language teacher. Nevertheless, the result of linguistics studies is applied linguistics. It is sub-branch of linguistics which helps language teaching by explaining language structures and their meanings, shortly, the nature of language, to language teacher<sup>3</sup>.

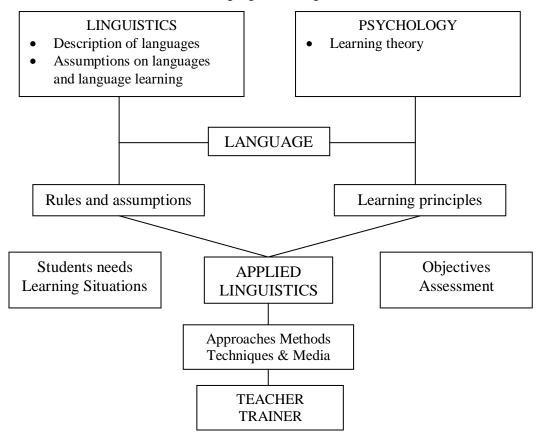
# **B. PSYCHOLOGY OF LANGUAGE TEACHING**

After understanding the nature of language, language teaching focuses on another important question: "How to teach language?". At this point, psychology helps language teacher, like other teachers. Psychology proposes theories and principles to understand how people learn, what effects their learning, how they learn best, etc. Consequently, the relation between science and language teaching has two basic dimensions: linguistics and psychology. Demirel's figure summarize this relation<sup>4</sup>:

<sup>4</sup> Yildiz, Erol. 2006.

<sup>&</sup>lt;sup>3</sup> Yildiz, Erol. 2006, the implementation of constructivism in language teaching for Turkish learners. (unpublished/magister thesis of selcuk university) page: 17

Figure 2.1
The Relation between Language, Linguistics Psychology and Language Teaching



# C. LEARNING THEORIES

In psychology and education, learning is commonly defined as a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in one's knowledge, skills, values, and world views.<sup>5</sup> There are many different theories of how people learn. What follows is a variety of them, and it is useful to consider their

<sup>5</sup> Svein Sjøberg, 2007, *International Encyclopaedia of Education* 3rd Edition, Oxford: Elsevier (in print). Page 2

application to how your students learn and also how you teach in educational programs. It is interesting to think about your own particular way of learning and to recognize that everyone does not learn the way you do.

There are three main categories or philosophical frameworks under which learning theories fall: Behaviorism, Cognitive, and Constructivism. Behaviorism focuses only on the objectively observable aspects of learning. Cognitive theories look beyond behavior to explain brain-based learning. Whereas constructivism views learning as a process in which the learner actively constructs or builds new ideas or concepts<sup>6</sup>.

#### 1. Behaviorism

Behaviorism, also known as behavioral psychology, is a theory of learning based upon the idea that all behaviors are acquired through conditioning. Conditioning occurs through interaction with the environment. Behaviorists believe that our responses to environmental stimuli shape our behaviors<sup>7</sup>.

There are two major types of conditioning:

<sup>&</sup>lt;sup>6</sup> Brown, Douglas. 2000. Page: 7-13

<sup>7</sup> \_\_\_\_\_\_, learning theories — behaviorism. Asiaeuniversity. Taken from http://eoplelearn.homestead.com/BEduc/Chapter\_6.pdf

# a. classical conditioning

It is a type of learning which is based on the association of a stimulus that does not ordinary elicit a particular response with another stimulus that does elicit response<sup>8</sup>.

# b. Operant conditioning

Operant or instrumental conditioning is a form of learning in which the consequences of behavior lead to changes in the probability that the behavior will occur<sup>9</sup>.

# 2. Cognitive

Cognitive Psychology focuses on the study of how people think, understand, and know. They emphasizes on learning how people comprehend and represent the outside world within themselves and how our ways of thinking about the world influence our behaviour. From a cognitive learning perspective, learning involves the transformation of information in the environment into knowledge that is stored in the mind. Learning occurs when new knowledge is acquired or existing knowledge is modified by experience<sup>10</sup>.

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<sup>&</sup>lt;sup>8</sup> Brown, Douglas. 2000. Page: 22

<sup>&</sup>lt;sup>9</sup> Ibid

<sup>10</sup> \_\_\_\_\_\_, learning theories - cognitive learning theories. Asiaeuniversity. Taken from http://eoplelearn.homestead.com/BEduc/Chapter\_5.pdf

#### 3. Constructivism

From another constructivist perspective, learners try to make sense of the world by relying on their pre-existing schemas. Learning is aided by social interaction with peers and teachers and via real world experiences. There are theoretical parallels to be drawn between the recent constructivist movement and the work of previously studied cognitive psychologists such as Jean Piaget, Lev Vygotsky, and Jerome Bruner<sup>11</sup>.

To summarize the concepts and approaches described in the three perspectives above, the table may help to pinpoint certain ideas which are associated<sup>12</sup>.

**Table 2.1**School of Thought in Language Learning

Time frame	School of thought	Typical themes
Early 1900s &1940s &1950s	Behaviorism	<ul> <li>Description</li> <li>Observable performance</li> <li>Scientific method</li> <li>Empiricism</li> <li>Surface structure</li> <li>Conditioning, reinforcement</li> </ul>
1960s & 1970s	Cognitive	<ul> <li>Generative linguist</li> <li>Acquisition</li> <li>Interlanguage systematically</li> <li>Universal grammar</li> <li>Competence</li> <li>Deep structure</li> </ul>

<sup>11</sup> \_\_\_\_\_\_, learning theories – metacognition and constructivisms. Asiaeuniversity. Taken from http://eoplelearn.homestead.com/BEduc/Chapter\_6.pdf

<sup>&</sup>lt;sup>12</sup> Brown, Douglas. 2000. Page: 12

Time frame	School of thought	Typical themes
1980s, 1980s & early 2000	Constructivism	<ul> <li>Interactive discourse</li> <li>Sociocultural variable</li> <li>Cooperative group learning</li> <li>Interlanguage variability</li> <li>Interactionist hypotheses</li> </ul>

#### D. CONSTRUCTIVISM

According to the numerous learning theory described above, Constructivism is hardly a new school of thought. The constructivism theory of learning states that learners themselves formulate knowledge in relation to prior learning states that learners themselves formulate knowledge in relation to prior learning states that learners use their environment. This theory was proposed by piaget and Vygotsky. They argued that A view of learning that says learners use their experiences to actively construct understandings that makes sense to them, rather than have understanding delivered to them in already organized form state than have understanding delivered to them in already organized form state than have understanding that students learn by actively constructing their own knowledge. It explains that student finds, checks and transforms new information with its rules and revises unnecessary thought. When learners encounter something new they reconcile it with the previous knowledge and experience. They may change, or they may discard the new information as irrelevant.

<sup>&</sup>lt;sup>13</sup> Koetsier, John. 2010, *constructivism and self-learning*, educational journal, university of british Columbia

<sup>&</sup>lt;sup>14</sup> Brown, Douglas. 2000. Page: 11

Twomey Fosnot defines constructivism by reference to four principles <sup>15</sup>: (1) learning, in an important way, depends on what we already know. (2) New ideas occur as we adapt and change our old ideas. (3) Learning involves inventing ideas rather than mechanically accumulating facts. (4) Meaningful learning occurs through rethinking old ideas and coming to new conclusions about new ideas which conflict with our old ideas. So, Students in order to understand and acquire knowledge, they must work in problem solving, inquiry-based learning, drawing conclusion and conveying their knowledge in collaborative learning environment so that students can formulate and test their ideas.

#### 1. Core Ideas of Constructivism

Within the large family of constructivist learning theorists, there are some ideas that more or less all subscribe to. Hence, they may be seen to be a mild version of constructivist claims. Here are some of these core ideas, partly based on the analysis of Taber<sup>16</sup>.

a. Knowledge is actively constructed by the learner, not passively received from the outside. Learning is something done by the learner, not something that is imposed on the learner.

<sup>15</sup> Twomey Fosnot, C. (1989). *Enquiring teachers, enquiring learners: A constructivist approach for teaching*. New York: Teachers College Press. Page: 79

<sup>16</sup> Sjøberg, Svein. 2007, *Constructivism and learning* Invited contribution to Baker, E.; McGaw, B. & Peterson P (Eds) *International Encyclopaedia of Education* 3rd Edition, Oxford: Elsevier (in print)

- b. Learners come to the learning situation (in science etc.) with existing ideas about many phenomena. Some of these ideas are ad hoc and unstable; others are more deeply rooted and well developed.
- c. Learner has their own individual ideas about the world, but there are also many similarities and common patterns in their ideas. Some of these ideas are socially and culturally accepted and shared, and they are often part of the language, supported by metaphors etc. They also often function well as tools to understand many phenomena.
- d. These ideas are often at odds with accepted scientific ideas, and some of them may be persistent and hard to change.
- e. Knowledge is represented in the brain as conceptual structures, and it is possible to model and describe these in some detail.
- f. Teaching has to take the learner's existing ideas seriously if they want to change or challenge these.
- g. Although knowledge in one sense is personal and individual, the learners construct their knowledge through their interaction with the physical world, collaboratively in social settings and in a cultural and linguistic environment.

Constructivist learning encourages critical thinking and creates active and motivated learners. It involves inventing and constructing new ideas <sup>17</sup>.

<sup>&</sup>lt;sup>17</sup> Gray, Audrey (2007), *The Road to Knowledge is Always under Construction': A Life History Journey to Constructivist Teaching*. SSCA research centre. University of Saskatchewan.

Learning process, according to this theory, emphasizes on student actively interpret and construct their knowledge. Active process in which an individual interacts with environment and transforms it into thought constructively cognitive structure which already exists in their mind.

# 2. Constructivism Characteristics

Rakes, flowers, Casey & Santana define some characteristics of constructivism approach <sup>18</sup>. Those are:

#### a. Constructed

According to this characteristic, students come to learning situations with already prior knowledge, ideas, and understandings they have. Students will integrate new experiences and interpretations to construct their own personal meaning with this prior knowledge.

## b. Active

Students are responsible for their own learning. They are expected to conclude a new idea in a given situation or context. Students also help set their own goals and means of assessment.

# c. Reflective

Teachers should create opportunities for students to question and reflect on their own learning processes, either privately or in group

<sup>18</sup> Rakes, G. C., Flowers, B. F., Casey, H. B. & Santana, R. (1999). *An Analysis of Instructional Technology Use and Constructivist Behaviors in K-12 Teachers*. International Journal of Educational Technology, <a href="http://www.outreach.uiuc.edu/ijet/v1n2/rakes/index.html">http://www.outreach.uiuc.edu/ijet/v1n2/rakes/index.html</a>.

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discussions. The teacher should also create activities that lead the student to reflect on his or her prior knowledge and experiences.

#### d. Collaborative

Students together review and reflect on their learning processes, they can pick up strategies and methods from one another. In this case they will colaborate with others and share their opinion in classroom.

# e. Inquiry- or Problem-Based

The main activity in a constructivist classroom is solving problems. Teacher must provide condition in which students can learn. It has problem-based learning for student to use inquiry methods to ask questions, investigate a topic, and use a variety of resources to find solutions and answers.

#### f. Evolving

Student will develope a new construction of knowledge by drawing conclusions, and, as exploration continues, they revisit those conclusions and modify them to support new knowledge or experiences.

# E. THE APPLICATION OF CONSTRUCTIVISM IN ENGLISH LANGUAGE TEACHING

Constructivist language teaching method is process oriented. The process can be explained with Piaget's words: scheme, assimilation, accommodation,

disequilibrium, and equilibrium<sup>19</sup>. Every learner has cognitive structure he has constructed through the schemes. Scheme are tools that the organism uses to learn. Further, Piaget as cited in Yildiz Erol stated that babies know the object around by sucking. Here, sucking is the scheme for learning. As baby grows, his schemes become more complex. But when the organism meets a new situation, the organism compares the new situation existing cognitive structure. Then, he creates new scheme, change his cognitive and begins to behave according to the new structure. This is called accommodation. Then, Piaget mention that the interaction between assimilation and accommodation process results in equilibrium. Equilibrium stands for the cognitive operation in which the organism equals the existing structures to the experience.<sup>20</sup> However, sometimes the organism cannot equals the new experience with the existing structure. Therefore, the equilibrium of cognitive structure delimitates and disequilibrium occurs. According to Piaget as cited in Erden M, since people always prefer equilibrium, they feel anxious. Thus, organism is trigged to obtain new information and construct his cognitive structures. When he gets the necessary knowledge, he adapt his cognitive structure and reconstruct the equilibrium<sup>21</sup>.

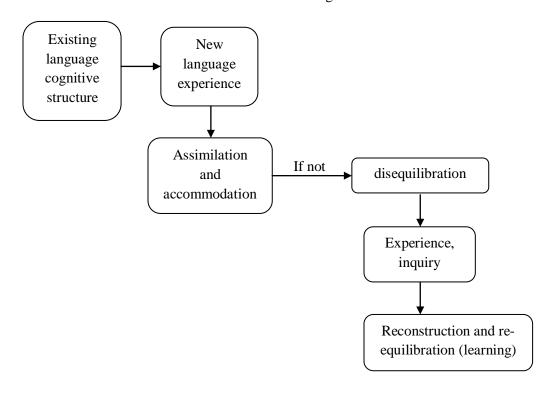
The summary of the constructivist learning process is in the following figure:

<sup>&</sup>lt;sup>19</sup> Yildiz, Erol. 2006, the implementation of constructivism in language teaching for Turkish learners. (unpublished/magister thesis of selcuk university) page: 62

<sup>&</sup>lt;sup>20</sup> Ibid. Page: 61-63

<sup>&</sup>lt;sup>21</sup> Ibid. page: 61-63

**Figure 2.2**Constructivism Learning Process



From the figure, we can say that any approaches which are used by teacher to implement the constructivism theory in the classroom must be oriented through the scheme.

# F. ROLES OF THE TEACHERS AND STUDENTS

Constructivist learning is a decision-making process which consists of the learners' own motivation, beliefs, ability, and experience. The individual is selective, constructive and active in process. While teacher should have become features for the success of a program built on constructivism principle<sup>22</sup>. The

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<sup>&</sup>lt;sup>22</sup> Yildiz, Erol. 2006. Page: 68

following represents a summary of some suggested roles teachers and students in the constructivist learning  $^{23}$ .

Table 2.2
Role of Teacher and Student in Constructivist Learning

Teacher's Role	Students' Role
Become one of many resources that	Learners are responsible for their
the student may learn from.	learning.
Engage student in experiences that challenge previous conceptions of their of their existing knowledge	Students are sense-maker. They are expected to conclude the meaning of a new structure in given situation/context.
Allow student response to drive lesson and seek elaboration	Learner are expected to cooperate with other learners
Encourage spirit discussion among	Learners should be curious,
students	patient, eager and decisive to learn
Use cognitive terminology such as	Learner should use what they have
"classify, analyze, and create" when	learned and share their experience
framing tasks	in the classroom
Encourage and accept student autonomy and initiative	their assignment and problem solving.
Do not separate knowing from the	Students are encouraged to explain
process of finding out	their answers and their thinking.
Insist on clear expression from	• • • • • • • • • • • • • • • • • • • •
students. When they can	pour their ideas and listen to others
communicate their understanding,	so that they can build their own
then they have truly learned	understanding.

# G. ASSESSMENT IN CONSTRUCTIVIST CLASSROOMS

In constructivist learning environments, assessment is not a separate examination at the end of the course; rather, assessment methods are integrated

<sup>&</sup>lt;sup>23</sup> Yildiz, Erol. 2006. Page: 68-70

into the learning process itself<sup>24</sup>. This is not to find out how much of the information studied a student can remember but to promote the learning process and students' knowledge construction. Moreover, educators accept that traditional examinations often lead students to adopt a surface approach to learning and studying. Furthermore, the traditional examinations are not able to identify the actual changes in students' knowledge. Standardized testing practices are also considered to be major obstacle to school in utilizing constructivism learning.

From a constructivist perspective, informal assessment is not less important than formal assessment. Testing cannot take the place of teacher's everyday interaction with students Informal assessments refer primarily to teacher observations of eye contact, body language, facial expressions, and work performance. These observations can complement formal assessments as a basis for instructional assessment.

Jonassen as cited in Fusun summarizes some of the evaluation strategies that could be used to assess constructivist learning:<sup>25</sup>

#### 1. Goal-Free Evaluation

The constructivism learning evaluation can not be processed before the learning process begins. The learning process as well as the evaluation would be biased. It must be addressed according to students' condition in the classroom while constructing new ideas.

25 Ibid

<sup>&</sup>lt;sup>24</sup> Füsun Kesal, 2003, an investigation on constructivist classroom characteristics in elt methodology it courses, unpublished. Middle East Technical University

#### 2. Authentic Assessment

Authenticity of an assessment is based on ownership of learning, in this case is the student and the context they are learning.

# 3. Knowledge Construction

Evaluators need to focus on learning outcomes that will reflect the intellectual processes of knowledge construction. A major criterion for assessing knowledge construction outcomes must be originality. Learning is considered to be the process of knowledge construction, the instructor is the one who can best evaluate that knowledge construction.

# 4. Experiential Construction (Process vs. Product)

It is the process of knowledge acquisition that should be evaluated, rather than a product. Evaluating how learners go about constructing knowledge is more important than the resulting product. It can be implemented in the form of replays, dramatizations, interviews, observations, group discussions, critical thinking, knowledge telling, co-investigation, and problem solving activities since those ctivities are considering knowledge construction.

#### 5. Context-Driven Evaluation

Since the instruction must be addressed in some meaningful, real-word context, evaluation should also occur in contexts that are just as rich and complex as those used during instruction.

# 6. Context-Dependent Evaluation

Since constructivist learning is supported by rich contexts, designers and evaluators must consider the context in which learning is taking place.

# 7. Multiple Perspectives

The assessment must consider multiple Perspectives of studesnts. The assessment is constructed including a set of criteria for assessing the quality of learning outcomes. Moreover, since evaluation is necessarily subjective, each with a meaningful perspective and reasonable characteristics should evaluate the learner.

#### 8. Multimodal

Since the assessment is multi-perspectival, the results will be in multiple outcomes, and therefore, the result should be evaluated in a somewhat different way.

# 9. Socially-constructed (Negotiated) meaning

Self- evaluation of learning is important in constructivism learning. It can best be used as a negotiating tool for guiding learners during the learning process. It should be in the form of argumentation which negotiates the goal of learning.

From the characteristics above, it can be seen that assessment of learning is performance-based. For assessing performance there are numerous ways such as written exams requiring the learners to demonstrate their higher order thinking, journals, logs, portfolios, research reports, projects, compositions, physical

models or performances in the forms of plays, debates, dances or other artistic representations. Performance assessment also involves critiquing and discussing students' work or performance

Ediger as cited in Fusun stated that the reliability of these assessment techniques may be questionable. For example, the knowledge and skills measured by authentic assessment do not allow easy comparisons among students and these assessments lack generalizability to other contexts<sup>26</sup>. The effectiveness of authentic assessment depends on clarity of the criteria set. Therefore, arbitrary or not clearly defined evaluation strategies may not yield sound results. Portfolio assessment may also be difficult to get reliability of the test.

Furthermore, Herman H as cited in Fusun assreted that assessing students' products and performances requires well-designed. Designing these doctrines through interaction and negotiation with the students builds consensus about what the purpose is in a learning activity, about the nature of meaningful criteria and about how assessments reflect the efficacy of the teacher as a promoter of understanding<sup>27</sup>.

<sup>27</sup> Fiisun Kesal, 2003

<sup>&</sup>lt;sup>26</sup> Füsun Kesal, 2003, an investigation on constructivist classroom characteristics in elt methodology ii courses, unpublished. Middle East Technical University

#### H. LEARNING DEVICE

According to Heinich as cited in Azhar Arsyad learning device is a media wich brings message or information containing instructional reason or teaching purpose<sup>28</sup>. Learning device is all kind of materials used to assist teacher / learner in executing school activity. They are the information, equipment and text for instructors that are required for planning and review upon training implementation. Such materials can be in the form of written materials and also unwritten materials.

A learning device at least covers some characteristic<sup>29</sup>. Which are:

- 1. Learning guidance (for teacher or learner).
- 2. Competency which will be acquired.
- 3. Content.
- 4. Supporting information.
- 5. Exercises.
- 6. Guidance practice.
- 7. Evaluation.
- 8. Learning reflection.

# I. STUDENT WORKSHEET

The formal definition of student worksheet can be described as papers containing tasks for students. This paper includes some instruction and guidance

<sup>&</sup>lt;sup>28</sup> Azhar Arsyad. 2004. *Media Pembelajaran*. Jakarta : PT. Raja Grafindo Persada. Page; 3

<sup>&</sup>lt;sup>29</sup> Departemen Pendidikan Nasional. 2008. *Pedoman pengembangan bahan ajar*. Departemen Pendidikan Nasional, Direktorat jendral Pendidikan Dasar dan Menengah, jakarta.. Page 8

to finish some assignment. In order to understand what student worksheet really is, It must be classified into the function and the role of student worksheet in the learning process.

#### 1. The Functions of Student Worksheet

In teaching and learning process, student worksheet has many functions <sup>30</sup>. Those are:

- a. To activate student to learn.
- b. To assist students to find and build learning concept based on observation and data description which are gotten from the activity.
- c. To assist student to build their own concept through skill process approach.
- d. To help students getting lesson note from classroom activity, and
- e. to help teacher preparing teaching-learning activity.

# 2. The Roles of Student Worksheet

From the statements above learning device plays a big role in learning process. The use of learning device presents some benefits to the learning. Those benefits are:<sup>31</sup>

a. Student worksheet clarifies message and information with the result that teaching and learning process becomes more effective.

Departemen Pendidikan Nasional. 2008. *Pedoman pengembangan bahan ajar*. Departemen Pendidikan Nasional, Direktorat jendral Pendidikan Dasar dan Menengah, jakarta.. Page: 13

<sup>&</sup>lt;sup>31</sup> Azhar Arsyad. 2004. *Media Pembelajaran*. Jakarta: PT. Raja Grafindo Persada. Page; 25-27

- b. It engages students' motivation by guiding students' attention toward selflearning according to their ability and interest.
- c. It Solves the restriction of sense, space and time.
- d. It Offers the real learning experience.
- e. Learner can use to practice the newly constructed knowledge.

It can be seen that student worksheet is a kind of learning media which can be used by students and teachers to support the teaching and learning process. The main purpose of the worksheet is to create situation or context that present the main point new knowledge which will be presented by teacher to students.

# J. WORKSHEET DEVELOPMENT REQUIREMENTS

The existence of student worksheet has considerable influence in teaching and learning process, so that the preparation of LKS must meet various requirements of the terms of didactic, terms of construction, and technical terms<sup>32</sup>.

#### 1. Terms of Didactic

To regulate the use of worksheets that can be used with the universal nature for students who are slow or clever. Student worksheet is more emphasis on process to find a concept, and most importantly, provide variation through a variety of media and student activities to stimulate self-learning. Student worksheet is expected emphasis on developing social

<sup>&</sup>lt;sup>32</sup> Roehiati Eli DKK, \_\_\_\_\_, pengembangan lembar kerja siswa (lks) mata pelajaran sains kimia untuk smp kelas vii, viii, dan ix, research article, UNY, Jogjakarta.

communication skills, emotional, moral, and aesthetic. Learning experience is determined in purpose of personal development of students.

#### 2. Terms of Construction

It associates with the use of language, sentence structure, vocabulary, difficulty level, and clarity in the LKS. Terms of construction includes:

- a. Use appropriate language to the students' maturity level.
- b. Use clear sentence structure.
- c. Notice student's ability level to determine lesson sequence.
- d. Avoid too much open-question.
- e. Do not refer to the resources book beyond the student's legibility.
- f. Provide adequate space to give students flexibility to write and illustrate the student worksheet.
- g. Use simple sentence.
- h. Use more illustrations than words.
- i. Have a clear purpose and useful as a motivation source.
- j. Have an identity to facilitate their administration. For example, class, subjects, topics, names, date and so on.

#### 3. Technical Terms

It emphasizes on student worksheet presentation in the form of writing, illustrating, drawing and student worksheet appearance.

# a. Writing

- 1) Use letter block.
- 2) Use bold for a topic
- 3) Use short sentence with no more than 10 words in a line.
- 4) Use frame to distinguish command and student answer.

# b. Drawing

It has to present the information or message about the content to the student.

# K. STAGES FOR DEVELOPING STUDENT WORKSHEET

The students worksheet is prepared and developed based on the following stages. Those are<sup>33</sup>:

# 1. Curriculum analysis.

It is directed to determine the standard competence which needs worksheet. It is done by analyzing of standard competence, basic competence, main lesson, and indicator.

# 2. Worksheet requirement map

Worksheet requirement map is essential determine the amount of worksheet which must be arranged and worksheet sequence can be seen.

Departemen Pendidikan Nasional. 2008. *Pedoman pengembangan bahan ajar*. Departemen Pendidikan Nasional, Direktorat jendral Pendidikan Dasar dan Menengah, jakarta. page: 23

# 3. Worksheet title.

Worksheet title is determined based on basic competence on the curriculum. One basic competence can be made as worksheet title only if the competence level is not too big. The level of basic competence can be detected by divided into four learning lessons. However, one basic competence which is divided into more than learning lessons must be made into two worksheet titles.

# 4. Establishing worksheet

Worksheet establishment can be done by these following steps:

- a. Basic competence formulation.
- b. Determining assessment instrument.
- c. Arranging Lesson.
- d. Worksheet structure, which is included:
  - > Title
  - > Teaching-learning guide.
  - > Directed competence.
  - Additional information.
  - > Tasks and learning activities.

#### L. WORKSHEET CREDIBILITY ASPECT

Nieveen stated that an item is claimed to have quality if it fulfills the quality aspects<sup>34</sup>. Those are: (1) validity. (2) Practicality, and (3) effectiveness. Worksheet will be credible if it has those criteria.

# 1. Validity

Worksheet validity is gained from the result of validation. It relies on the expert validator's perception. There are three criterions for worksheet validity which is made by the researcher. Those are:

- a. Instruction aspect, it covers the instruction clarity.
- b. Content aspect. It covers:
  - > Proper lesson material.
  - > Compatibility of lesson material and indicator.
  - ➤ Compatibility of instruction and student level.
  - Worksheet roles for motivating students building their own concept to the lesson

# c. Language aspect

- Language written in the worksheet must have correct formal English norm (grammar, structure, and culture).
- > Students' difficulty to understand the language used.
- > The clarity of sentence structure.

<sup>34</sup> Nieven Nienke, 1999. Design approach and tools in education and training, London: Kluwer Academic publisher.

- ➤ Avoid ambiguity on the question.
- > Systematic

# 2. Practicality

Student worksheet practicality is gained from the result of student learning. It determines that the work of the student worksheet is universal. It also determines whether it is useable for any kinds of students which have multiple contrasting ways of knowing and describing.

# 3. Effectiveness.

Worksheet effectiveness can be seen on students' response on the questionnaire given at the end of lesson. It finds out how the student worksheet works.

# M. REVIEW OF PREVIOUS STUDIES

This research does not stand alone. There have been some studies which discussed a lot about constructivism teaching and learning, and other worksheet developments. They have different objective and perception. This study is kind of implementation of the existed theory which is applied to developing worksheet.

Those related studies are:

 The Implementation Of Constructivism In English Teaching For Turkish Learners

This research can be major reference for my research. The study is entitled *The Implementation Of Constructivism In English Teaching For* 

Turkish Learners<sup>35</sup>. The problem underlined in this research is that the level of success in teaching English to Turkish learners can not be said to be as well as desired. This study assumes that the most significant factor in this failure is the method and approach that are followed to create learning experiences in the classroom. As a result, the aim of the study is to investigate constructivism in the classroom to solve the problem occurred.

The result of implementation have exhibited that constructivism can be applied in teaching English. More than this the success gained at the end of the implementation was much more better than traditional method. Thus, it can be put forward that constructivism language teaching method can help teacher to direct learner's attention and interest upon language learning.

# 2. Teaching Reading Through Constructivism

The similar studies of this research *teaching reading through constructivism*<sup>36</sup>. It is done by Renova Marpaung. She is a lecture of STIKIP Teladan, Medan. She focused on describing teaching process on reading through constructivism theory. She describes the teaching phase and process of teaching reading through this way.

Some principles and characteristics of constructivism were well described. She provided overgeneralization on her research. She conducted

Marpaung Renova. *Pengajaran reading dalam bahasa inggris berdasarkan pendekatan constructivism.* (unpublished/magister thesis of STKIP Teladan, Medan)

<sup>&</sup>lt;sup>35</sup> Yildiz, Erol. 2006, the implementation of constructivism in language teaching for Turkish learners. (unpublished/magister thesis of selcuk university)

teaching process through some teaching procedure for implementing the constructivism theory. She applied three phase activity which included pre reading-whilst reading-and post reading to introduce the topic and encourage students to learn it. She also introduced another procedure for teaching reading which was SQ3R (survey, question, read, recite, and review). It was like reciprocal approach which focuses on (1) making summary, (2) making question, (3) asking revising, and (4) predicting. She aimed those teaching procedure to apply constructivism theory.

It was done successfully because students' mastery learning achieved 75%. It meant that the procedure was successful and applicable on worksheet development based constructivism.

# 3. Computerization-Based Teaching Device Development

Another research proposal related to this study is *teaching* development of teaching media based TIK<sup>37</sup>. It was done by Drs Muhammad Yaumi, M,hum.,MA. He was graduate student of UIN Alauddin Makasar. The research proposal told about teaching media development which was integrated to information and communication technology (TIK). The study was aimed to increase learning affectivity and efficiency through this way. He creatively enclosed computerization for teaching English which provides new alternative inventory of English teaching and learning.

Yaumi, Muhammad, 2010, *Pengembangan Bahan Ajar Bahasa Inggris Berbasis TIK*. (unpublished/magister thesis of UIN Alauddin, Makasar)

He had similar procedure for developing his research proposal. He used define, design, develop, and decimate phase on his proposal which he described them into 10 phases. However, he limited the proposal on developing without any decimating or distributing. He based instructional theory for developing TIK as teaching media. It hold a big role to create conducive learning. It provides four benefits which are (1) as teacher representation, (2) as media to achieve objective of study, and (3) as optimalization device for learners.

This research is effective because for implementing this research he asserts some teaching and learning concepts as his teacher believes. They are behaviorist who agree that learning is behavior changing influenced by interaction between stimulation and response.