

Analysis of Development Needs of Learning Evaluation Teaching Material in Elementary Teacher Education Program Using Contextual Approach

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Abstract

The research aims to formulate the teaching materials needs of learning evaluation with contextual approach, and produce prototype into teaching materials that will be used in the course of evaluation of learning in PGSD. As well as to formulate the effectiveness of learning evaluation teaching materials produced. The study begins with field study to obtain a picture of the needs of learning evaluation teaching materials. The data collection use questionnaires, interviews, and documents. The analysis result of the needs of learning evaluation teaching material are as follows: (1), 97% of respondents expressed the need of learning evaluation teaching materials in PGSD still not enough (2) 87% of respondents had difficulty in understanding the teaching materials provided in PGSD, (3) 95 % of respondents said that the available teaching materials are still not coherent. (4) 90% of respondents claimed that the evaluation teaching material in PGSD needs to be developed

KEYWORDS: Learning evaluation, contextual approach

INTRODUCTION

One of the ways that can be done to find out the results achieved by educators in the learning process is through evaluation. Evaluation is very important and necessary process in the education system because the evaluation reflects how far the development/progress of the education result. In each study, educators must try to know the results and the learning process which conducted. By conducting the evaluation, educator knows the achievement of the expected objectives from the students, and we can also identify the weaknesses and find the solutions from the learning problems. Learning evaluation is the process of activities to obtain data information regarding student's learning result and processed into value in the form of quantitative and qualitative data in accordance with certain standards

Developing the competency of critical thinking, creative and productive among the students is very important in this global competition era, because of the level of complexity of the problems in all aspects of modern life is getting higher. The ability to do the evaluation activities for the student of PGSD is a very serious matter to be considered, remember that the prospective elementary school teachers require extensive knowledge about the concept of evaluation and implementation of evaluation activities in elementary school.

In order to provide knowledge about learning evaluation in elementary school, PGSD provide learning evaluation course for a semester which worth 3 credits. The

course is taught by expectations that student have provision in implementing the learning evaluation in elementary school, therefore the evaluation material which taught is related to learning in elementary school.

The reality in the field, learning evaluation book in PGSD which is one of teaching materials for student is not yet available specifically. The lectures are still using module published by DIKTI and other sources from evaluation books in general and also materials from the internet. The available teaching materials are limited and some of materials have been less relevant to the applicable curriculum at the moment.

The other reality delivered, Prastowo (2012:6) stated that the reality in the world of education with regard to the conditions of teachers and lecturers. The teachers often use teaching materials which are traded freely, although sometimes not in accordance with the socio-cultural context and conditions of learners. This will make the course less than the maximum goal is achieved by the students.

There are various types of teaching materials. They are: (1) the teaching materials visual consisting of printed material such as handouts, books, modules, student's worksheets, brochures, pictures, etc. (2) teaching materials audio such as cassette, radio, phonograph records, and compact audio disc (3) audio-visual teaching materials such as, video compact disc, movies, (4) multi-media interactive teaching materials such as computer-based teaching materials and web. From the various types of instructional materials, a visual teaching material in the form of textbooks that can be used by the student in the course evaluation will become the focus of this study.

Textbook is a handbook for a course that is compiled and written by experts in related fields and meet the standards of textbooks and officially published and distributed (KepMendiknas No. 36/D/O/2001 article 5, paragraph 9). Textbook is different with handbook, because the textbook is arranged based on specific provisions related to student learning, and based on the plan of learning activities of students.

Teaching material is materials or learning materials which arranged systematically then used by teachers and students in the learning process (Pannen and Purwanto, 2001). Teaching materials have a structure and sequence of systematic, describes the instructional objectives to be achieved, motivating students to learn, anticipate difficulty learning in the form of the provision of guidance to study these materials, provide great practice for students, providing summaries, and are oriented to students in individual (learner oriented).

Ruhimat, 2011: 152) states, material or learning material is basically the "content" of the curriculum, in the form of subjects, subjects or subjects with topics / subtopics and details. While Jasmadi in (Bieber, 2013: 1) states that teaching materials is a set of tools or learning tool containing learning materials, methods, limitations, and how to evaluate designed systematically and attractive in order to achieve the expected goals of achieving competence or sub competence with all its complexity.

Grouping teaching materials according to the *faculté de Psychologie et des Sciences de l'Education Université de Genève* on its website are written media, audio visual, interactive and integrated electronics are then referred to as *medienverbund* (German language, which means integrated media) or media mix. A teaching material at least includes the following: (1) Learning guide (student/teacher guide) (2) competence

that will be achieved, (3) supporting information, (3) exercises, (4) work instructions, can be a worksheet, (5) evaluation

Teaching materials have some characteristics, Widodo and Physical in Ika Lestari (2013: 2) revealed that the characteristics of teaching materials, namely (1) self-instructional; (2) self-contained (3) stand-alone (4) adaptive (5) friendly. Elaboration of the following five characteristics:

First, *self-instructional* is that teaching materials which can make students capable to self-study with the teaching materials developed. Therefore, in the teaching materials there must be clearly defined objectives and provide learning materials are packed into units or more specific activities.

Second, *self-contained* that the entire subject material of one unit of competence or sub competence which learned is completely contained in one teaching material.

Third, *stand-alone* means are not dependent on other teaching materials or should not be used together with other teaching materials.

Fourth, *adaptive* is that teaching materials should have high adaptive power against the development of science and technology.

Fifth, *user friendly* that every instruction and exposure information shown is helpful and friendly to the user, including makes the user easy to response and accesses it.

Widodo And Physical, M. Atwi Suparman (2012: 284) also states that teaching materials has characteristics as follows.

- 1) Self-instructional, which means teaching materials can be studied alone by student. It is because it prepared for its purpose.
- 2) Self-explanatory power, are able to explain their own teaching materials because it uses simple language, a coherent content and arranged systematically
- 3) Self-paced learning, a pace that suits itself without waiting for other students who are slower or feel left behind from the other students who understand faster.
- 4) Self-contained, is teaching materials which complete by itself so that students do not need to depend on other teaching materials, except when it intends to enrich and deepen their knowledge.
- 5) Individualized learning materials, is teaching materials designed in accordance with the capabilities and characteristics of students who are studying them.
- 6) Flexible and mobile learning materials, teaching materials which can be studied by student anytime, anywhere, at rest or moving
- 7) Communicative and interactive learning materials, teaching materials designed in accordance with the principle of effective communicative and involved process of interaction with the students who are studying them.
- 8) Multimedia, computer based materials, teaching materials designed computer-based multimedia, including the optimally utilization if the student has access to it.
- 9) Supported by tutorials, and study group, teaching materials that may need support tutorials and study groups.

Teaching materials are a key point that must exist before the execution of the learning process. In the dharma of teaching every lecturer is required to prepare in the classroom to prepare (1) curriculum, (2) teaching materials, (3) lecturing process. Study materials are prepared to make the students quickly get the knowledge and skills, especially if the teaching materials are based on interactive multi-media. The provision of teaching materials that complete and interesting will be able to motivate students to read

and study carefully, in the end it will have ultimately impact on improving learning results.

In order to improve students' understanding of the learning evaluation, it developed the teaching materials which prepared contextually. In the CTL learning, students are given with flexible knowledge or transferred from another problem from a personal context, social, or from cultural context to the personal, social, and other cultures (Johnson, 2002). Learning CTL rely on a special memory. Selection of information is based on the individual needs of students. Contextual learning always associate the concept being taught to the prior knowledge which already possessed by students. In its implementation, CTL learning implements authentic assessment.

Development of teaching materials is the one form of learning activities to improve or enhance the quality of learning that takes place. The use of teaching materials in the lecture is one of the ways to resolve the passive lecture. Students will be helped with the process of learning through the provision of teaching materials, as well as lecturers helped in reducing the presentation of material and increased guidance in solving problems.

Based on the exposure described above, the problem is how the teaching materials are relevant to the learning evaluation in PGSD? The research questions are, (1) how are PGSD student's needs of learning evaluation teaching materials? (2) How to develop the prototype into learning evaluation teaching materials with CTL approach? (3) How the feasibility of learning evaluation teaching materials with CTL approach in PGSD? and(4) how much the effectiveness of learning evaluation teaching materials with CTL approach after the test?

The research objective is to produce a first-year prototype learning evaluation teaching materials which can contribute to improving the quality of the learning process and results in the learning evaluation course. Based on the general objective, described several specific objectives (1) find out the condition of the field about learning evaluation teaching materials, (2) produced the teaching materials' prototype in accordance to the learning evaluation needs in PGSD, (3) find out the feasibility of teaching materials produced, (4) find out the effectiveness of learning evaluation teaching materials with contextual approach.

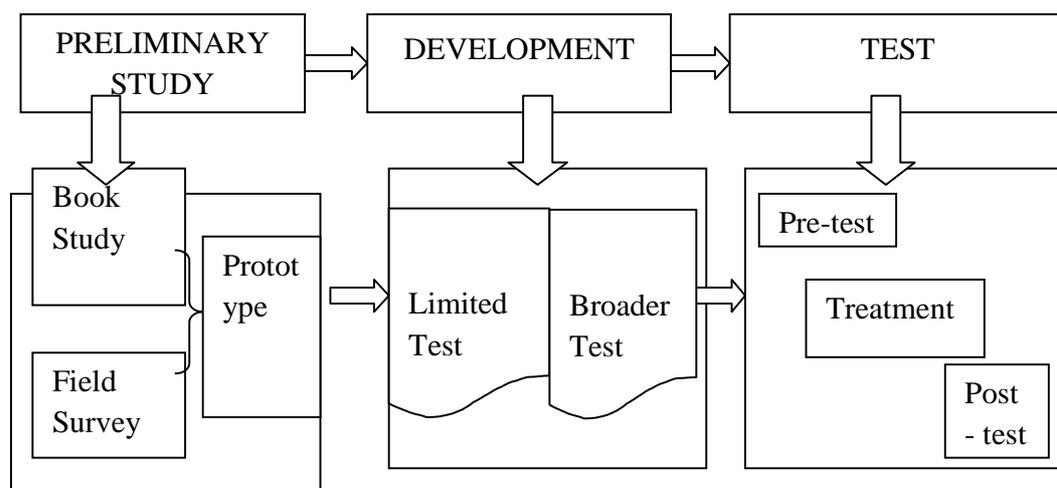
METHOD

The research which used is development research, in this development, the researcher refers to the development model (*research and development*) by Borg and Gall (2003) in Sukmadinata (2008: 169-170), which consists of several steps, as follows: (1) Research and information collection, measurement needs, literature study, research on a small scale, and considerations in terms of value. (2) Planning. Arrange a research plan, including the required abilities in the implementation of the research, the design or steps of study the possibility of testing in a restricted environment. (3) Develop preliminary form of product. The development of learning materials, learning process and evaluation instruments. (4) Preliminary field testing. (5) Main product revision. Improve or enhance the test results. (6) Main field testing. Do the test broader. (7) Operational product revision. (8) Operational field testing. (9) Final product revision. (10) Dissemination and implementation.

The procedure which described above is certainly not a standard step which must be followed. Ardhana (2002: 09) express that the procedures for implementing the development research is not a standard steps that must be followed rigidly, each development could choose and decide the most appropriate step for them based on specific conditions which encountered in the development process. Therefore, it can be concluded that the researcher in the development research can do modifications adapted to the conditions and considerations exist.

According to the development model (*research and development*) by Borg, W.R. and Gall MD in Sukmadinata (2008: 169-170) and Ardhana (2002: 09), of the ten-step development, the researcher refers to the model of development in Sukmadinata modified as follows: (1) Preliminary Study which included the book study, field study and arrangement of the initial product, (2) Development that includes limited test and test broader, (3) Test that includes pre-test and post-test. This is can be done because the development research which done only for one college and adjust the characteristics, limitations of time, effort and cost. The steps taken are described as follows:

First Chart. Steps of Development Research



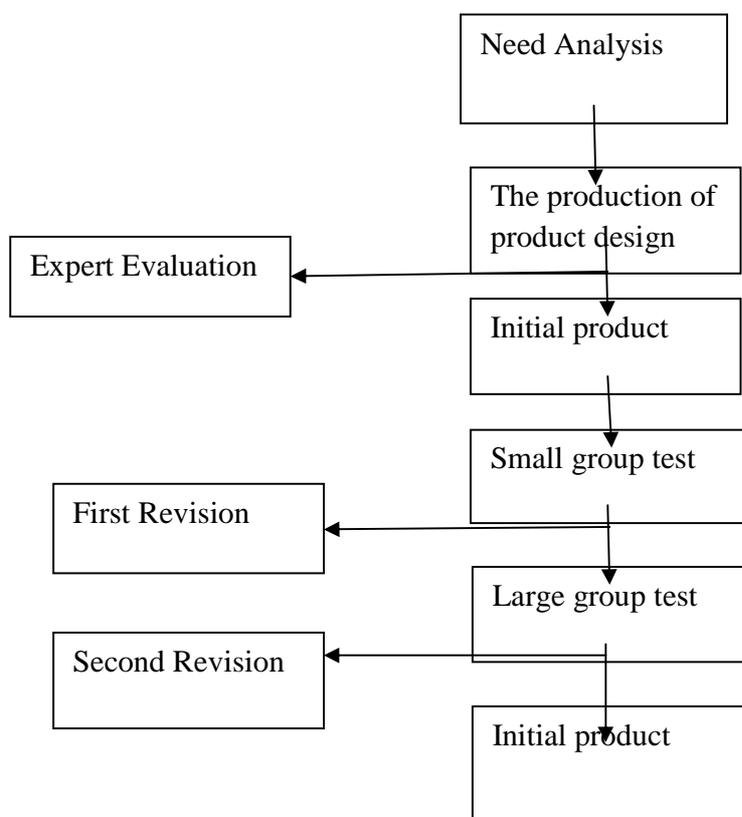
The study was designed for two years, the first year is expected to obtain (1) information about the existence of the textbook needs in real terms, through a needs analysis which implemented. (2) Produce a prototype model that has been validated by experts (field of study expert and instructional development expert), and test the product / model to obtain teaching materials that can be used on PGSD, Faculty of Education, UNS.

In this section, the test will done in three stages, (1) Test experts and validation, at this stage the field of study and instructional development expert do the conceptual analysis and revision, (2) small group test (3) Test the field, the test conducted in the real groups such as the student of PGSD who take the learning evaluation course.

In the second year, the research expected to obtain the final design of the development model which followed by testing of the model and complete the final report and the production of research article which published in national journals.

The steps which conducted by researcher can be described on the chart as follows:

Second Chart. Plot Development Research Procedure conducted by researcher:



RESULTS AND DISCUSSION

RESEARCH RESULT

The results of the development research of teaching materials Learning Evaluation described by steps of developing teaching materials. Results of development research material can be seen from the components include: Collecting information (identify the needs of teaching materials to students and faculty), product design, validation design (analyze the product by expert), improve the design, product test I revision of the product, product test (II), product enhancements, and the final product.

1. Data Collection

In the data collection phase, the researcher conducted the requirements identification of literature teaching materials toward the teacher, the result of identification as follows:

a. Identification of Learning Evaluation Teaching Material need

Identify the teaching materials need to students and teachers, by give questionnaire and interview. Information obtained from students of PGSD sixth semester and lecturer of learning evaluation course.

Questionnaires and interviews conducted on students and professors with some question in the questionnaires, before the researcher designs the teaching materials. The results of the questionnaires are as follows:

Lecturer's understanding of the function of teaching materials is good enough. Lecturer opines that the function of teaching materials for educators is as a tool for educators to understand the learning materials. It is also strengthened by the results of the interview, to explain if the function of making learning evaluation teaching materials is as a point for the lecturers to teach evaluation to their students. Therefore, it can be said that the lecturer knows the importance of teaching materials.

Students' understanding of the function of teaching materials is also quite good. Students opine that teaching materials can help them to learn the concepts of evaluation easily and to support the success in learning.

Second, students' understanding of learning evaluation teaching materials is still lacking, it is because in PGSD does not have a special teaching materials which focus on the Elementary School itself. The available teaching materials which provided and used by the educators today are learning evaluation teaching materials which used for long distance education program which published by DIKTI. In addition, the teaching materials are general evaluation teaching materials from the internet and the other publishers. Although the learning evaluation teaching materials are available, the arrangement of the material is still less coherent. This is a constraint faced by the lecturers to the availability of teaching materials, besides the lack of teaching materials oriented to learning in elementary school.

Third, the understanding of make the teaching materials is still lack, because the lecturers' will to create teaching materials still less. This is reflected in the number of teaching materials created by lecturer at. Even though there is training for arrange the teaching materials in university, the teacher's productivity in preparing teaching materials is still very limited.

Fourth, the students stated that the need of available teaching materials in PGSD still not enough, and they need learning evaluation teaching material which oriented to elementary school.

Based on the identification of the need of teaching materials above, the researcher follow up with design the learning evaluation teaching materials in accordance with what is expected by the lecturers and students. The result of the design and identification of evaluation teaching materials produce teaching materials product that can motivate the students in achieve learning objectives which are expected.

2. Presentation of Data Test Expert

After the product of the development of learning evaluation teaching materials successfully arranged into draft, the next step is assessment through expert testing. The presentation of this data is to provide empirical evidence about the appropriateness of the content validity of the model of development of evaluation teaching materials.

The purpose of expert test is to obtain early feedback to determine the weaknesses in its design and structure, material, form and language used. Then, those weaknesses will be revised in order to improving the quality of evaluation teaching materials in accordance with the objective.

Acting as expert assessors in the expert test is the experts who associated with the topics that have been developed, in this case is a science education professor and lecturer who teach the evaluation course. Expert assessors come from PGSD FKIP UNS which consist of 5 people.

The approach that used in the assessment is interactive and consultative approach, namely to hold direct dialogue with the experts mentioned above for obtaining feedback and suggestion from the correction of the material presented.

Expert assessment conducted in May until June 2016. The things that got responses include:

a. Completion of contents

- 1) Teaching materials of learning evaluation, the materials concepts which presented should be sorted with reference to the competence and indicators listed in the syllabus / RPS
- 2) The examples to facilitate understanding of concepts and subject matter, should be simple, clear, concise, to be easily understood.
- 3) Statistical formulas used should be accompanied by a clear explanation, and it looks rather large
- 4) Examples of application assessment instrument should be focused on learning materials in primary school syllabus or Elementary School.
- 5) Examples of instruments should be varied according to the types of tests and non-test.

b. Completion of the language

- 1). Definition of terms in textbooks should be accompanied by a translation, in order to facilitate students to understand.
- 2). Words and phrases used should use common words, communicative, simple, and easy to understand.
- 3). The format of writing, in particular sub-chapter should be arranged well.
- 4). Coherence of each paragraph and use of punctuation should be revised.

c. Completion of the form

- 1). Textbooks should not be too thick
- 2). Cover should be interesting in order to create interest in reading
- 3). Quality paper using a good quality
- 4). The size of a textbook is not too long

Based on the results of the assessment, it can be concluded that the teaching materials are designed not too many changes, so it can do further assessment. However, to improve the quality of the feasibility of the content and form of teaching materials that attract interest in reading, need to be revised. After the expert test which includes the changes to the content, language improvement and refinement of form. and revised, teaching materials that have been refined and then re-requested appraisal of teaching materials by experts, and conduct focus group discussion (FGD) with lecturers, teachers and students with the aim to solicit input on the teaching materials that have been through expert testing, in order to produce good teaching materials.

Table Number of Proportion of Respondents Assess the Learning Evaluation Teaching Material

No	Component	Assessment				
		1	2	3	4	5
	Eligibility of Contents					
1.	Conformity to SK, dan KD	-	5	3	7	15
2.	Conformity to student's need	-	-	3	10	17
3.	Conformity to teaching material's need	-	1	4	5	20
4.	Validity of material substance	-	3	7	-	20
	Language					
5.	Legibility	-	-	8	3	19
6.	Clarity information	-	-	4	4	22
7.	Conformity to Bahasa Indonesia's rules	-	2	2	2	24
8.	The use language in effectively, efficiently	5	2	3	8	12
	Presentation					

9.	Clarity of purpose	-	-	-	9	21
10.	The order of presentation	-	4	2	4	24
11.	Motivation	-	5	7	10	8
12.	Completeness of information	-	-	4	17	9
	Graphic					
13.	The use of the font (size and type)	-	-	6	10	14
14.	Lay out	-	-	4	11	15
15.	Illustration, picture, chart, danphoto	-	-	-	5	25
16.	Visual design	-	-	-	10	20

Keterangan:

- 1 = not clear
- 2 = less clear
- 3 = clear enough
- 4 = clear
- 5 = very clear

3. Data Results Discussion

During the trial takes place through the focus group discussion (FGD), researchers conducted a good discussion with experts, professors, teachers and student representatives. The results of discussions by providing inputs proposed by professors, teachers and students as test subjects. Discussions were held after they read the teaching materials. The results of discussions as a basis to determine the feasibility of teaching materials that will be developed. Teaching materials to be eligible if the respondent or the subject perceives instructional materials testing is feasible and acceptable according to the criteria of the developer.

From the results of questionnaires and discussions with respondents obtained the following data: (1) In terms of components of the contents of teaching materials in general teaching materials evaluation of learning to be well received, according to the results data computation proportion of respondents who rate the teaching materials evaluation, which states very clear 59,5% and stating clear 18,33%. (2). From the language component, 64% of respondents states very clear and 14% of them stating the clear. (3) From the component materials presentation, 51,67% said very clear, and 33,25% stated clear (4) in terms of graphics components, materials, 61,67% states very clear and 21,75% stating the clear.

From the data on the discussions and results of questionnaires regarding the respondents' assessment of the teaching materials developed, it is known that the evaluation of teaching materials developed very clear and very well received, though there are parts of the teaching materials are perceived / judged not clear or difficult to understand. Therefore, the suggestion of the discussions and questionnaires used as material information to revise the teaching material in order to be well received.

DISCUSSION

Based on data obtained through discussions, questionnaires and interviews as well as the results of data analysis can be concluded that this research has produced a

prototype model of teaching materials evaluation. Teaching material declared acceptable after a revision carried out by a team of experts and followed by a small group test through group discussions' focus and group testing's focus. In order to test a limited group and extensive data analysis has not been completed, because it is still in the stage of reporting progress of the research report.

From the analysis of the data for the first problem formulation that is based experts test declared fit after a revision to the design, component content, language, presentation and graphics components. Revisions made by the advice of experts.

Feasibility content validity by experts is supported by the results of the analysis of the following data:

a. Of the many experts who assess the proportion of teaching materials, the expert assessment of the teaching materials on average 65% said excellent 30% said good, and 5% said less.

b. After revision and continued limited test through group discussions' focus, conducted by lectures, teachers and students, teaching materials are accepted. The results of the data of the group discussion are: (1) the content of the component materials, 77.83% stated that the teaching materials are clear and acceptable, the rest is stated clear enough and less clear. (2) In terms of language, 78% stated that the teaching materials are clear, (3) in terms of presentation materials, 83.92% stated that the teaching materials are clear, (4) in terms of graphics, 83.42% stated that the teaching materials are clear. From the analysis of these data, it can be stated that the evaluation of learning teaching materials can be received well. However, of course there should be revised in accordance with expert advice and suggestions result from a discussion group. Then, the extensive test can be done through *T Student* test.

CONCLUSIONS AND SUGGESTIONS

Conclusion

In accordance with the stages of the objectives' development and results of the development can be summarized as follows:

1. Evaluation of learning teaching materials stated acceptable by experts and respondents
2. Prototype models of evaluation of learning teaching materials declared ready to be revised and continued extensive testing.
3. Some lecturers and students are expecting the teaching materials to motivate students in learning, as well as teachers that the book can be their handbook to teach.

Suggestion

1. Based on the results of the questionnaire, the need of teaching materials for the course evaluation of learning is really needed, therefore it is suggested to held a making teaching material training in university

2. Research the development of teaching materials is limited in terms of the teaching materials based on one subject, so it is advisable on other researchers to conduct follow-up studies the development of teaching materials with different subjects.

3. The implementation of research development that similar yet different topics such as the development of other learning models.

BIBLIOGRAPHY

Abdul Majid. (2011). *Perencanaan Pembelajaran Mengembangkan Standar Kompetensi Guru*. Bandung: PT Remaja Rosdakarya

E. Mulyasa. (2008). *Standar Kompetensi Dan Sertifikasi Guru*. Bandung: Remaja Rosdakarya

Lestari, Ika. (2013). *Pengembangan Bahan Ajar Berbasis Kompetensi*. Padang: AkademiPermata

M. Djauhar Siddiq, dkk, (2008). *Pengembangan Bahan Ajar*. Direktorat Jenderal Pendidikan Tinggi

Ruhimat, Toto. dkk, (2011). *Kurikulumdan Pembelajaran*. Jakarta. PT Raja Grafindo Persada.

Wardhana, Yana. (2010). *Teori Belajardan Mengajar*. Bandung: PT. Pribumi Mekar.

Pannen, P., Purwanto. 2001. *Penulisan Bahan Ajar*. Jakarta: DirjenDikti Depdiknas

Gafur A. 2004. *Pedoman Penyusunan Materi Pembelajaran (Instructional Material)*. Jakarta: Depdiknas Mulyasa E. 2006. *Kurikulum Yang Disempurnakan*. Bandung: PT Remaja Rosdakarya.

Tri widodo A. 1993. *Tingkat Keterbacaan Teks. Suatu Evaluasi Terhadap Buku TeksIlmu Kimia KelasI SMA* Disertasi. Jakarta: IKIP Jakarta.

Panen, P &Purwanto, 1997. *Penulisan Bahan Ajar*. Jakarta: Ditjen Dikti Depdikbud