CONTEXTUAL-BASED "NUTRITIONAL NUTRITION TEACHING" BOOK DEVELOPMENT

by Rita Ismawati

CONTEXTUAL-BASED "NUTRITIONAL NUTRITION TEACHING" BOOK DEVELOPMENT

Rita Ismawati*, Mauren Gita Miranti
* Department of Home Economic, Faculty of Engineering, Unesa, Surabaya, Indonesia
E-mail : ritaismawati@unesa.ac.id ;

Abstract: This study aims to produce a valid, practical and effective textbook for Community Nutrition courses. Development was carried out using the Dick and Carey model, with the stages of (1) identifying learning objectives, (2) learning analysis, (3) identifying initial behaviors, (4) formulating learning objectives, (5) developing test items, (6) developing strategies learning, (7) developing the contents of textbooks. The initial draft of the draft was validated by expert judgment, then revised the draft II was produced, then field trials were carried out. Data were collected by tests, questionnaires, observation sheets, analyzed descriptively statistically. Research results: (1) the validity of student textbooks in the very valid category; (2) implementation of learning equipment 3.59; lecturer response 3.54; and 3.78 student responses with very practical categories. (3) The effectiveness of the device with the students' character development value has increased from the beginning of 1.83, the first cycle is 2.76 and II 3.56; the value of the average performance of the first cycle is 80.97 and the second cycle is 88.63 with the effective category and the average value of the concept understanding pre test 49.31, post test I 84.66 and post test II 89.94, the effective category. Based on the findings of the development of textbooks meet the criteria of valid, practical and effective, so that they can be used in a wider scope.

Keywords: teaching book , nutrition community, contextual teaching learning, the quality of learning.

I.   INTRODUCTION

National education objectives are set forth in Law No. 20 of 2003 states, National Education serves to develop the ability and shape the character and dignity of a nation that is dignified in order to educate the life of the nation, aims to develop the potential of students to become believers and fear of God Almighty, noble, healthy, knowledgeable, competent, creative, independent, and a democratic and responsible citizen. To achieve this goal the government and institutions engaged in education have carried out various reforms and improvements that are influenced by changes in the field of science and technology nationally and globally. One of them is the level of education in higher education. For the purpose of national education, higher education always strives to improve the quality and relevance of education through (1) curriculum development; (2) increasing the professional capacity of lecturers; (3) the development of quality and excellence in education; and (4) developing facilities and teaching materials. In order to follow up, the government aggressively reformed the curriculum and the procurement of relevant textbooks used in schools. This is because books are something that cannot be separated in the learning cycle. Without a book, learning will become lame. The more supporting books, the more interesting learning (Sitohang and Sibuea, 2015). This is

in line with Government Regulation (PP number 19 of 2005 Article 20), it is implied that lecturers are expected to develop their own learning material, which is then confirmed through Minister of National Education Regulation No. 41 of 2007 concerning Process Standards, which among others regulates planning learning process that requires educators in education units to develop learning implementation plans (RPP). One element in RPP is a learning resource.

Community Nutrition is one of the courses taught to students of the Bachelor of Science Education Study Program. This course is important to teach because of its close relationship between nutrition and food, where nutrition can affect health, intelligence, and high work productivity (KEMENKES, 2014). The community nutrition course is a continuation and development of nutrition science courses that are interdisciplinary, many related to other sciences, such as the Catering, Anatomy of Physiology, Socio-Culture, Medicine, Chemistry, and so on (Soekirman, 2000). Community nutrition emphasizes the application of nutrition in the community, studies on nutrition issues, efforts to improve nutrition problems, general guidelines on balanced nutrition (PUGS), nutrition counseling in the community, and nutritional status assessment. The course is at a concrete operational stage, so the learning process is still dependent on concrete and contextual

objects. For this reason, teaching materials in the form of books used should adopt contextual learning.

Contextual Teaching and Learning (CTL) is a learning concept where the lecturer presents the real-world situation into the classroom and encourages students to make connections between their knowledge and the context of their daily lives (personal, social and cultural context) and their application in their lives as family members and society (Nurhadi, 2002; Hasnawati, 2006; Trianto, 2010). Jhonson (2002) reveals that Contextual teaching and learning enables students to connect the content of the academic subject with the immediate context of their daily lives to discover meaning. It enlarges their personal context furthermore, by providing students with a fresh experience that stimulates the brain to make new connections and consecently, to discover new meaning. From these opinions it is expected that students have the knowledge / skills that can be flexibly applied from one problem to another. This opinion is in line with Sagala (2013) that learning will be more meaningful if the participants are educated to experience what they learn, not just obey it. Target-oriented learning mastery of the material proved successful in the recall competition in the short term, but failed to equip children to solve problems in the long run. With this concept, learning outcomes are expected to be more meaningful for students. The learning process takes place more naturally in the form of student activities working and experiencing, not the transfer of knowledge from lecturer to students (Nurhadi, 2003).

Current perspectives on what it means for learning to be contextualized include the following: situated cognition, social cognition, and distributed cognition. Contextual learning has the following characteristics: emphasizes problem solving; recognizes that teaching and learning need to occur in multiple contexts; assists students in learning how to monitor their learning and thereby become self-regulated learners; anchors teaching in the diverse life context of students; encourages students to learn from each other; and employs authentic assessment (Imel, 2000) sehingga diharapkan mahasiswa mampu mencapai kompetensi secara maksimal. Contextual learning with a constructivism approach is seen as one of the strategies that fulfill the principles of learning for community nutrition courses for undergraduate Bachelor of Education students.

Because constructivist learning theory maintains that learning is a process of constructing meaning from experience, it is congruent with much of adult learning, including self-direction, transformative learning, and situated cognition.

CTL is an educational process that aims to help students see the meaning in the academic material they learn by connecting academic subjects with the contents of everyday life, namely with the context of personal, social, and cultural life. Contextual learning as a learning model that provides facilities for student learning activities to search, process, and find learning experiences that are more concrete (related to real life) through the involvement of student activities in trying, doing, and experiencing themselves. Thus, learning is not just seen from the product side, but the most important thing is the process. Therefore, through a contextual learning model, teaching is not a transformation of knowledge from lecturers to students by memorizing a number of concepts that seem to be separated from real life, but more emphasis is placed on facilitating students to find life skills from what he learned

Textbooks are guidebooks for students in learning activities that contain subject matter, inquiry activities based on concepts, science activities, information and examples of the application of science in everyday life (Trianto, 2011: 227). Muslich (2010: 37) explains that textbooks are books that contain a description of material about a particular subject or field of study, which is arranged systematically and has been selected based on specific objectives, learning orientation and student development, to be assimilated. This is in line with the understanding of textbooks according to the Bookkeeping Center (2006: 1) which states that textbooks are books that are used by students at certain levels as instructional media, related to certain fields of study. Minister of National Education Regulation No. 11 of 2005 explains that textbooks are compulsory reference books for use in schools that contain learning material in order to increase faith and piety, character and personality, the ability to master science and technology, as well as physical and health potential compiled based on national education standards. Amri and Ahmadi (2010: 159) define textbooks as all forms of materials used to assist teachers / instructors in carrying out teaching and learning activities in the classroom. According to Sanjaya (2010: 141) material or subject matter is everything that becomes curriculum content that must be mastered by students in accordance with basic competencies in order to achieve the competency standards of each subject in a particular education unit. Based on this opinion it can be concluded that textbooks are a set of substance lessons that cover curriculum content that students must achieve in learning activities and are arranged systematically so as to create an environment / atmosphere that allows students to learn.

Learning resources that are used for teaching the subjects in the community nutrition courses so far have come from medical textbooks, biochemistry, Anatomy Physiology, Anthropology and Health Sociology. The fact is that the textbooks are not in accordance with the background / background of the Bachelor of Education

2

Bachelor students who are mostly from the field of Social Sciences (Vocational High School and Social Studies High School). For this reason, it is necessary to have textbooks prepared by the lecturers / lecturers based on the characteristics of the user and the expected standard of competence. This is expected to increase students' enthusiasm in learning that results in increasing their competence. Competencies that are expected to be maximal if supported by a conducive learning environment. One of them is by providing contextual-based learning textbooks that maximize the potential of students. Contextual based textbooks offer lessons that are potentially strong to improve the quality of human learning (Sitohang and Sibuea, 2015). From the observations, it was found that student learning outcomes were relatively low. Some of the most important factors in this problem are the source books used. Existing textbooks are not yet in accordance with the characteristics of students, whereas textbooks as learning resources can improve learning activities and creativity that benefit both the teacher or students (Mulyasa, 2013).

According to Gagne, Briggs, and Wager (Degeng, 1998), that textbooks that are systematically designed will have a large influence on the development of individual human resources, providing flexibility in preparing short-term and long-term learning, facilitating the management of teaching and learning processes, and facilitate learning, because it is designed on the basis of knowledge about how humans learn. The content of textbooks must be based on the characteristics of the structure of the content of the course, so that it can increase learning acquisition and retention rather than just following the order of the textbook content (Degeng, 1989). For this reason the development of textbooks must be planned, implemented and evaluated from the present aspects, accuracy and effectiveness so that the formation and improvement of competencies that are expected can be realized (Dewey, 2002). Dimyati (1993) also asserts that students who are related to learning resources will internalize and are thought to improve their cognitive, affective, and psychomotor domains. Based on this, to improve efficiency and effectiveness in the learning process it is necessary to develop teaching materials that have very important functions in learning. If learning can be achieved well then it will certainly be able to support the quality of education, because one of the main problems faced in the field of education to date has to do with quality and efficiency problems (Ibrahim, 1994; Prastowo, 2013). The efficiency of the learning process according to Degeng (1989) appears in: (1) improving the quality of learning, (2) saving learning time in order to achieve goals, (3) increasing capacity without reducing the quality of learning, and (4) decreasing costs without reducing the quality of student learning .

The objectives in the development of this textbook are: (1) providing textbooks that are in line with the characteristics of the undergraduate students of Tata Boga Unesa; (2) knowing the feasibility of the Community Nutrition textbook, and (3) knowing the effectiveness of the use of contextual textbooks on Community Nutrition courses.

II. MATERIALS AND METHODS

This research is a development research. Learning materials developed in the form of contextual Community Nutrition textbooks refer to the development of Borg & Gall (1983) combined with learning design models Dick and Carey (2009). To see the feasibility of textbooks, the steps from the development stage are as follows: (1) conducting preliminary research, which includes: (a) identifying learning needs or objectives and determining the core competencies of the course, (b) analyzing learning by determining skills more specific things that must be learned, (c) identify the characteristics and initial behavior of students, and (d) write the final abilities and indicators; (2) compile a benchmark reference test by developing an assessment item to measure the ability of students estimated in the learning objectives; (3) collection of materials which includes: (a) collection of learning material, (b) making and collecting images (illustrations); (5) product validation; (6) product revision; and (7) product trials.

The data obtained is data about the state of the Community Nutrition textbook that has been developed. This data is collected through expert validation, questionnaires / questionnaires distributed to students. Assessment instruments for validators and individual trials, small groups or limited field groups are made in the form of a Likert scale that has been given a score. Then the data were analyzed quantitatively descriptively, namely calculating the percentage of indicators for each category of the developed teaching materials. Furthermore, the product effectiveness test was carried out on Catering Class S1 students as much as two classes, each of which was 30 students. The instrument used is the learning outcome test aspects of knowledge in the form of multiple choices, amounting to 30 questions, each of which consists of the answer options a, b, c and d. The technique of scoring for objective questions is based on right or wrong, meaning that students who answer correctly on each item will be given a score of 3.33 (three point three three) and for students who answer wrongly will be given a score of 0 (zero) so the score is at least 0 and a maximum score of 100. Before being used in the test of learning outcomes, the instrument of learning outcomes test needs to be tested first. For this reason, validity, reliability, difficulty index and differentiation are carried out.

Before testing the effectiveness it is necessary to test for normality and homogeneity test. The normality test is done to find out whether the data is normally distributed. Homogeneity test to find out whether the data is homogeneous by knowing the same or not the variance of two or more distributions. To see whether there is a significant difference between learning outcomes and the use of textbooks and textbooks is done using a different test (t-test). With dk = (n1 + n2-2), the correlation criteria obtained are said to be significant (accepted hypothesis) if the price of t count> t table for a significance level of 0.05. To see the effectiveness of textbooks that were experimented using the formula for calculating effectiveness.

III.   RESULT AND DISCUSSION

The development results that have been carried out can be described as follows:

1.   Identify learning objectives

The learning objectives of community nutrition courses are formulated based on the description of the competencies that have been determined by AIPGI (Indonesian Nutrition Institution Association). Learning objectives have the purpose of formulating specific learning objectives (indicators of achievement of learning outcomes) based on task analysis and concept analysis. Based on this, the learning objectives of the Community Nutrition course are a) students have knowledge of nutrition issues and general guidelines for balanced nutrition to understand nutritional conditions in the community; b) students are able to assess anthropometric nutritional status and food consumption in various community groups; c) students are able to analyze hazardous food additives in accordance with operational standards; and d) students have a caring, honest attitude and responsibility to design and carry out nutrition improvement programs through community nutrition counseling activities. This goal then becomes the basis for the preparation of tests and designing learning tools.

2.   Analysis of Learning Resources

Learning source analysis is identified according to learning objectives, learning materials, learning environment, and learning strategies in the learner. Analysis of learning resources is obtained based on student needs. The following is the result of the needs analysis of teaching materials from 150 student respondents:

Table 1. Results of Needs Analysis on Community Nutrition Teaching Materials in Accordance with CTL Learning Models

Category	Needs for community nutrition	Learning resource needs	Need for teaching materials	CTL's interest
Very agree	27%	54%	41%	32%
Agree	66%	42%	56%	36%
Disagree	7%	4%	3%	32%
Amount	100%	100%	100%	100%

From table 1 it can be seen that the need for the Community Nutrition course is very high, considering that in addition to affecting nutritional health it can also affect intelligence and work productivity. The need for learning resources is very high, this shows students still need a lot of learning resources so that learning and material are more easily accepted. The need for teaching materials is also very large, especially if the teaching materials in accordance with the learning model used and in accordance with the characteristics of students. Interest in contextual teaching and learning (CTL) learning models is quite enthusiastic, because students are directly involved in learning.

3.   Identify initial behavior

The initial behavior identification is done by giving a pretest to the sample of the study (students of the S1 Education Education Program who program the community nutrition courses). At this stage researchers look for information about the background of academic abilities (knowledge), cognitive development, and individual or social skills related to the learning topic.

4.   ICT Formulation

The formulation of specific instructional objectives (ICT) is carried out by describing each general purpose of the course in the form of behavior or competence that must be achieved by students after completing each learning unit. The standard competencies to be achieved in the learning of community nutrition courses are: Able to directly assess nutritional status in nutrition-prone community groups (toddlers, WUS, and the elderly) and interpret nutritional status based on secondary data, as well as conducting nutritional consumption surveys (SKG) in the community.

5.   Compile test items

Measurements were carried out through written theory tests (cognitive domains), a practical test was also developed to measure students' psychomotor skills by testing iodized salt and

hazardous food additives (BMT), assessing anthropometric nutritional status, 24-hour recall of nutritional status, and practice nutrition counseling in the community about nutrition issues and how to overcome them.

6. Develop learning strategies

The learning strategy used is Contextual Teaching and Learning. Contextual learning is oriented towards helping students to master three things, namely: (1) knowledge, that is what is in their minds forms concepts, definitions, theories, and facts; (2) competence or skills, namely the ability to act or something that can be done; and (3) contextual understanding, which is knowing the time and how to use knowledge and expertise in real life situations.

7. Develop textbooks

Refers to specific learning objectives, and learning strategies. In developing this textbook, it is carried out in several stages.

The initial stage of the design of textbooks is to create a material map derived from the final ability to be achieved, which will be developed into each chapter in the textbook. In each chapter there are: 1) introduction (learning instructions, basic competencies, learning indicators, and learning objectives); 2) presentation of material; 3) summary; 4) training; and 5) reading list. Textbooks that have been developed, validation will be carried out by experts to get input and to determine the feasibility of textbooks. The revised Community Nutrition textbook was then conducted a field test to find out the practicality and effectiveness of the tools that had been prepared. The subject of the field test was the 2015 class BGA Education S1 students as many as 56 people. Field trials obtained input from lecturers and students on the textbooks that have been compiled.

Based on the results of the validation of the learning device by the validator the device developed has been feasible to be used in learning. The results of the empirical validity test of items about concept understanding were analyzed by point-biserial correlation formula (bipbi), the results obtained were that 30 questions were valid because the r count> r table. Whereas the results of testing the differentiation of concept understanding tests obtained 30 items have a distinguishing power above 0.25. This means that questions are accepted and can be used in research. While testing the level of difficulty of test items by using Microsoft Excel-assisted formulas, it is obtained 1 problem with a difficult category, 19 items with moderate category and 10 items with easy categories. Furthermore, the

results of test reliability were calculated using the Kuder-Richardson 20 formula (KR 20) with a result of 0.72, thus the test has high reliability.

Tabel 2. Textbook Validation Results

Indikator	$\sum$	Katagori	Keterangan
Language Eligibility			
a. Straightforward	3,57	Very valid	Proper to use
b. Communicative	3,54	Very valid	Proper to use
c. Dialogical and interactive	3,70	Very valid	Proper to use
d. Conformity with the development of students	3,59	Very valid	Proper to use
e. Compliance with Indonesian language rules	3,53	Very valid	Proper to use
f. Use of terms, symbols and or icons	3,21	Valid	Proper to use
Presentation eligibility			
a. Presentation technique	3,15	Valid	Proper to use
b. Presentation support	3,43	Very valid	Proper to use
c. Presentation of learning	3,45	Very valid	Proper to use
d. Coherence and randomness of thought path	3,52	Very valid	Proper to use
Feasibility of content			
a. Dimensions of spiriual attitude	3,14	Valid	Proper to use
b. Dimensions of social attitudes	3,35	Very valid	Proper to use
c. Dimension of knowledge	3,68	Very valid	Proper to use
d. Material coverage	3,54	Very valid	Proper to use
e. Material accuracy	3,54	Very valid	Proper to use
f. Adherence to laws and regulations	3,45	Very valid	Proper to use
g. Skill dimension	3,53	Very valid	Proper to use

From table 2 shows the results of construct validation and content validation of textbooks in the category are very valid and feasible to use because according to the guidelines for the preparation of learning tools with character education with guided inquiry settings. This is in accordance with Maliyah's (2012) opinion which states that the approach to learning that can shape the character of students in order to be able to develop their potential is a guided inquiry approach. Underlying the inquiry learning approach is Piaget's theory that cognitive development depends

largely on how much the child actively manipulates and actively interacts with his environment, so that this CTL learning model is very suitable to be applied in the Community Nutrition course. Some aspects of assessment that need to be considered and corrected because they get less than 4 grades are: image color quality, creating interactive and contextual communication, sentence structure accuracy, language clarity, and spelling accuracy. Assessment results and suggestions from the validators are used to improve the next textbook.

The next validation phase is empirical validation through field trials. This trial is expected to get feedback to produce textbooks that are suitable for use in accordance with the characteristics of students as users. This is in line with the opinion of Borg and Gall (1983: 772) in the book Education Research an Introduction which suggests that development research is research oriented to developing and validating products used in education. At the time of the field test constructive advice was followed up so that the book produced really had good quality in line with expectations. Practicality of learning devices can be seen from: 1) the implementation of learning tools, 2) the response of lecturers / teaching teams, and 3) student responses. Textbooks are said to be practical to use if the average total score is a minimum or equal to 2.5. The following are observations of the implementation of the learning device.

Tabel 3. Learning Outcomes Observation Results

Implementation learning	Σ	Category
1st meeting	3,45	Practical
2nd meeting	3,47	Practical
3rd meeting	3,65	Practical
4th meeting	3,67	Very practical
5th meeting	3,58	Very practical
6th meeting	3,47	Practical
7th meeting	3,73	Very practical
Total average	3,59	Very practical

From table 3 it can be seen that the general learning performance experienced an increase in each meeting, although at the 6th meeting there was a decrease of 0.11 points. The average score for the implementation of learning is in a very practical category. The lecturers' response to the Community Nutrition textbook obtained a score of 3.54 and the response of the students was 3.78 both with the category of very practical. The effectiveness of developed textbooks known from the value of performance and the value of understanding the concept of students. Following are the values of performance and the value of understanding the concept of students.

Tabel 4. Student Performance Score

Steps	Average	T_{coun}	T_{table}	Category
Step 1	80,97	5,252	1,697	Efektif
Step 2	88,63	17,405	1,697	Efektif

Based on table 4, it is obtained the value of performance that has increased in the second cycle with t count> t table and with effective categories. In addition, the effectiveness of textbooks is also determined by the value of cognitive tests / understanding of the concepts of Community Nutrition. Kefektivan because learning with CTL becomes more active and students are directly involved in learning, students do not just receive and memorize information given by lecturers, but are required to actively seek to find out concepts through learning activities with an atmosphere that is made real, so students will it becomes easier to understand the concepts and principles of their own findings. Following are the scores of student cognitive tests.

Tabel 5. Understanding Value of Student Concepts

Steps	Average	T_{coun}	T_{table}	Category
Pre tes	49,31	- 14,635	1,697	Ineffective
Siklus 1	84,66	6,315	1,697	Effective
Siklus 2	89,94	16,284	1,697	Effective

Based on Table 5, it can be seen that the average value of the students' understanding concept test results has increased and the results are greater than the standard set value of 78, with t count> t table so as to effectively improve student learning outcomes. This is in line with the opinion of Degeng (1989) textbooks that can facilitate learning are textbooks that have clear components in the form of: (1) general learning objectives, (2) specific learning objectives, (3) specific instructions for textbook users, (4) a description of the contents of the lesson that is arranged systematically, (5) drawings / illustrations to clarify the contents of the lesson, (6) summaries, (7) formative evaluation, and follow-up for subsequent learning activities, (8) reading lists, and (9) answer key. These components are already in the developed community nutrition textbook.

Textbooks provide information or a relatively operational picture for the management of the learning process. Community nutrition textbooks prepare guidelines for students both for the sake of independent learning and in scheduled face-to-face activities, as well as methods and evaluations, and guideline for students.

There are several factors that cause differences in the average score of the value of understanding concepts in each meeting. First, the development of textbooks is based on communication theory, learning theory, and learning theory. Communication theory has a major

impact on the learning paradigm, namely the use of media or learning resources in learning. The abstract message or material will be clearer and better understood with the help of contextual-based textbooks. This is in line with the opinion of Nurhadi (2004: 4) which states that contextual learning will encourage students to understand the material and be embedded in the memory of students. Contextual-based textbooks offer learning that is potentially strong to improve the quality of human learning. Textbooks developed are also based on learning theory. The learning process occurs because of short-term and long-term memory synergy that is activated through the creation of external factors, namely the learning environment, that learning is more meaningful if the material is related to the real-world situation of students and encourages students to make connections between the knowledge they have with their application in their lives. Textbooks are also developed on learning theory. The presentation of material on textbooks is based on Bruner's learning theory and learning events according to Gagne. Bruner's theory is used as the principle of material presentation, starting from the easy things gradually towards more complex material. In textbooks, this presentation is shown in the formulation of indicators starting from easy things to difficult things. Formulation of indicators as well as a reference for presenting the contents of textbooks. By looking at the guidelines and assessment criteria according to Sugiyono (2010: 257) it can be concluded that the assessment of learning outcomes proves that the use of contextual-based textbooks is more effective in improving learning outcomes. This is in line with Gagne, Briggs, and Wager in Degeng (1998), that textbooks that are systematically designed will have a great influence on the development of individual human resources, providing flexibility in preparing short-term and long-term learning, facilitating the management of learning processes teach, and facilitate learning, because it is designed on the basis of knowledge about how humans learn.

IV. CONCLUSION

The assessment results of the validator : material expert, learning technology expert, linguist expert to teaching book has been developed as a whole is good , but need a little revised. Several aspects of assessment that need attention and repaired because they received a score less than four is: the quality of to a color image created communication and contextual interactive, the accuracy of structure sentence, clarity language, and the accuracy of spelling. Teaching Book have revised based on input experts , needs to be done

testing .The final result development teaching book needs to be done cooperation with publishers for printing that can be used by students.

REFERENCES

Amri dan Ahmadi, I. K. 2010. Konstruksi Pengembangan Pembelajaran. Jakarta: Prestasi Pustaka.

Degeng, I.N.S. 1998. Mencari Pendekatan Baru Pemecahan Masalah Belajar. Kuala Kencana:PT. Threeport Indonesia.

Degeng, I.N.S. 1999. Rancangan Pembelajaran. Teori dan Teknik Pembelajaran. Malang:Universitas Kristen Cipta Wacana

Dick, W. dan Carey, L.. 1990. The Systematic Design of Instruction: Third Edition. USA: Harper Collins Publishers.

Dimyati, M. 1993. Pandangan Behavioristik Vs Konstruktuvistik: Pemecahan Masalah Belajar di Abad XXI. Malang:PPS IKIP Malang

Endah Ariani Madusari, dkk. 2009. Metodologi Pembelajaran. Jakarta: Depdiknas

Hasnawati. 2006. Pendekatan Contextual Teaching Learning Hubungannya Dengan Evaluasi Pembelajaran. Jurnal Ekonomi dan Pendidikan, Volume 3 Nomer 1, April 2006.

Imel, Susan. 2000. Contextual Learning in Adult Education: Practice Application. Clearinghouse on Adult, Career, and Vocational Education, ERIC Publications. Washington DC.

Ismawati, Rita. 2006. Pengembangan Modul Multimedia Interaktif Gizi Untuk Meningkatkan Hasil Belajar, Aktivitas, dan Respon Mahasiswa S1 Pendidikan Tata Boga Jurusan Pendidikan Kesejahteraan Keluarga Fakultas Teknik Unesa, Laporan Penelitian Tindakan Kelas. Tidak dipublikasikan.

Johnson, E. B. 2002. Contextual Teaching and Learning : What is and why it's here to stay. United State of America: Corwin Press.Inc.

Joni, R.T. 1984. Pengembangan Paket Belajar. Jakarta: Depdikbud. P2LPTK.

Jurnal Ilmu Pendidikan Mutu Pendidikan Sekolah Dasar Di Daerah Diseminasi oleh A. Supriyanto, November 1997, Jilid 4, IKIP, 1997: 225

Kementrian Kesehatan RI. 2014. Pedoman Gizi Seimbang. Jakarta.

Kristiastuti, Dwi dan Rita Ismawati. 2004. Penggunaan Buku Ajar Pengolahan Makanan Nusantara Berbasis Kompetensi Untuk Meningkatkan Efektifitas Pembelajaran Mahasiswa S1 Pendidikan Tata Boga Jurusan Pendidikan Kesejahteraan Keluarga Fakultas Teknik UNESA. Laporan Penelitian SP4. Tidak dipublikasikan

Muslich , M. 2010. Texbook Writing: Dasar-dasar Pemahaman, Penulisan dan Pemakaian Buku Teks. Yogyakarta: ArRuzz Media.

Muslim, S. 1999. Refleksi Lima Belas Tahun Universitas Terbuka, Antara Harapan, Kendala, dan Tantangan. Departemen Pendidikan dan Kebudayaan. Universitas Terbuka. Surabaya: UPBJJ Surabaya.

Muhaji, 2005. Pengembangan Modul Termodinamika Untuk Meningkatkan Hasil Belajar Mahasiswa D3 Teknik Mesin Jurusan Pendidikan Teknik Mesin Fakultas Teknik Unesa. Laporan Penelitian Dosen Muda. Tidak dipublikasikan.

M. Dahlan Al Barry. Kamus Modern Bahasa Indonesia, Arloka, Yogyakarta, 1994: 329

Nurhadi. (2002). Pendekatan Kontekstual. Jakarta: Departemen Pendidikan Nasional. Direktorat Jenderal Pendidikan Dasar Menengah. Direktorat Pendidikan Lanjutan Pertama.

Pendidikan Nasional No. 11 Tahun 2005.

Reigeluth. 1992. Instructional Design Strategies and Tacties. Educational Technology Publications. New Jersey: Englewood Cliffs.

Riyanto, Yatim. 2010. Paradigma Baru Pembelajaran, Sebagai Referensi bagi Pendidik dalam Impelementasi Pembelajaran yang Efektif dan Berkualitas. (Cet. II). Jakarta: Kencana.

Sagala, S. 2013. Konsep dan Makna Pembelajan. Bndung: Alfabeta.

Sanjaya, W. 2010. Perencanaan dan Desain Sistem Pembelajaran. Jakarta: Kencana Prenada Media Group.

Seel, B.B. dan Richey, R.C. 1994. Instructional Technology: The Definition and Domain of The Field. Washington: AECT.

Suparman, A. 1991. Desain Instruksional. Jakarta: Depdikbud. Universitas Terbuka.

Supranta. J. Metode Riset, PT Rineka Cipta, Jakarta, 1997: 288

Suprijono, Agus. 2011. Cooperatif Learning, Teori dan Aplikasi PAIKEM. (Cet. V). Yogyakarta: Pustaka Pelajar.

Sumiati dan Asra. 2009. Metode Pembelajaran. Bandung: CV Wacana Prima.

Susdiyanto, Saat, dan Ahmad. 2009. Strategi Pembelajaran. (Modul Pendidikan dan Latihan Profesi Guru). Makassar: Panitia Sertfikasi Guru Agama Rayon LPTK Fakultas Tarbiyah dan Keguruan UIN Alauddin Makassar.

Sitohang, Candra dan Abdul Muin Sibuea. 2015. Pengembangan Buku Ajar Berbasis Kontekstual dengan Tema "Sehat itu Penting". Jurnal Teknologi dan Komunikasi dalam Pendidikan, UNIMED Volume 2 No. 2 2015.

Trianto. 2010. Model Pembelajaran Terpadu; Konsep, Strategi, dan Implementasinya dalam Kurikulum Tingkat Satuan Pendidikan (KTSP). Jakarta: Bumi Aksara.

CONTEXTUAL-BASED "NUTRITIONAL NUTRITION TEACHING" BOOK DEVELOPMENT

19% SIMILARITY INDEX   **14**% INTERNET SOURCES   **12**% PUBLICATIONS   **9**% STUDENT PAPERS

PRIMARY SOURCES

1	mulok.library.um.ac.id Internet Source	1%
2	ojs.uniska-bjm.ac.id Internet Source	1%
3	Submitted to Bay Path College Student Paper	1%
4	journal.lppmunindra.ac.id Internet Source	1%
5	www.slideshare.net Internet Source	1%
6	A Elvita, R Johar, T F Abidin. "The development of learning tools using treffinger model assisted by geogebra to enhance students' creativity", Journal of Physics: Conference Series, 2020 Publication	1%
7	jurnal.ustjogja.ac.id Internet Source	1%

improve students' HOTS and character",
Journal of Physics: Conference Series, 2020
Publication

19 **Submitted to Padjadjaran University**
Student Paper
<1%

20 **Submitted to University of Wollongong**
Student Paper
<1%

21 Agus Hasdiani. "The Implementation of
Problem-Based Contextual Approaches in
Natural Science Learning About Life and
Environment To Improve Learning Outcomes
at Elementary School", JP2D (Jurnal Penelitian
Pendidikan Dasar) UNTAN, 2020
Publication
<1%

22 M Alamsyah, G Marhento, M F Siburian, I A D
Astuti, Y B Bhakti. "Application of blended
learning with Edmodo based on POE learning
model to increase students understanding of
science concepts", Journal of Physics:
Conference Series, 2021
Publication
<1%

23 **docplayer.net**
Internet Source
<1%

24 E Susilaningsih, K Khotimah, S Nurhayati.
"Development of performance assessment
instrument based contextual learning for
measuring students laboratory skills", IOP
<1%

Conference Series: Materials Science and
Engineering, 2018
Publication

25 Muhammad Syaeri. "The Influence of Social
Interaction Learning Model, Learning
Motivation, Social Attitude on the Student
Learning Result of Geographic Subject in
Public Senior High Schools in Aceh Province",
Environment and Pollution, 2019
Publication

<1%

26 Rina Kurnia, Yeti Nurhayati. "DEVELOPMENT
OF INQUIRY-BASED STUDENT WORKSHEETS
(LKPD) ON MATHEMATICS SUBJECT IN THE
MATERIAL OF CUBES AND BLOCKS TO
IMPROVE MATHEMATICAL UNDERSTANDING
OF SLOW LEANERS", PrimaryEdu - Journal of
Primary Education, 2020
Publication

<1%

27 ejournal.undiksha.ac.id
Internet Source

<1%

28 Ihdiana, Ismail Tolla, Jumadi. "The
Development of Audio-Visual Learning Media
in Islamic Cultural History Subject for Eight
Grade Students of MT's Al-Amanah,
Jeneponto", Asian Journal of Applied Sciences,
2022
Publication

<1%

29 Rita Ismawati, Ita Fatkhur Romadhoni, Q.T Nurul, S.T Ratna. "Storability of Seaweed Jelly Candy based on Chemical, Physical and Microbiology Characteristics", IOP Conference Series: Earth and Environmental Science, 2019
Publication

<1%

30 departments.agri.huji.ac.il
Internet Source

<1%

31 mierjs.in
Internet Source

<1%

32 Submitted to Universitas Hasanuddin
Student Paper

<1%

33 F Y Velani, H Retnawati. "Application of contextual teaching and learning approaches in improving mathematics interest and learning achievement of elementary school students", Journal of Physics: Conference Series, 2020
Publication

<1%

34 G Y Arygunartha, Y P Situmeang. "Application of the contextual teaching and learning model as an efforts to improve student results and scientific performance of student physics", Journal of Physics: Conference Series, 2019
Publication

<1%

35 ejournal.ihdn.ac.id
Internet Source

<1%

36 ejournal.radenintan.ac.id
    Internet Source   <1%

37 ejournal.unesa.ac.id
    Internet Source   <1%

38 D L P Hadi, B Usodo, I Slamet. "Digital
    measurement of student learning style: Using
    smartphones for self-evaluation", Journal of   <1%
    Physics: Conference Series, 2020
    Publication

39 M Citraningrum, F Sudargo. "Education
    Development Based On Practicum To Develop
    Reflective Thinking Students Of Biology   <1%
    Teachers", Journal of Physics: Conference
    Series, 2019
    Publication

40 Yuli Utanto, Ghanis Putra Widhanarto, Yoris
    Adi Maretta. "A web-based portfolio model as
    the students' final assignment: Dealing with   <1%
    the development of higher education trend",
    AIP Publishing, 2017
    Publication

41 e-journal.metrouniv.ac.id
    Internet Source   <1%

42 jurnal.unimed.ac.id
    Internet Source   <1%

43 Muhammad Aunur Rofiq, Ika Nurwulandari. "ANALYSIS OF NEEDS FOR DEVELOPMENT OF BASIC CONCEPT SOCIAL STUDIES TEACHING MATERIALS IN PRIMARY SCHOOL TEACHER EDUCATION COLLEGE STUDENTS", PrimaryEdu - Journal of Primary Education, 2021
Publication

<1 %

44 Didin Saripudin, Kokom Komalasari. "The Development of Multiculturalism Values in Indonesian History Textbook", American Journal of Applied Sciences, 2016
Publication

<1 %

45 id.scribd.com
Internet Source

<1 %

Exclude quotes   On
Exclude bibliography   On

Exclude matches   Off