CHAPTER II
LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Teaching Materials

Teaching materials are materials that students must learn as a means to achieve basic competencies (Mone, 2008). According to Majid (2007), teaching materials are all forms of materials, information, tools, and text used to assist teachers/instructors in carrying out teaching and learning activities. Teaching materials or curriculum material (curriculum material) is the content or content of the curriculum that must be understood by students in an effort to achieve the objectives of the curriculum. According to the National Center for Vocational Education Researches/National Center for Competency-Based Training, teaching materials are all forms of materials used to assist teachers/instructors in conducting classroom teaching and learning activities (Nugraha, et al., 2013).

According to the Ministry of National Education in his book "Guidance of Development of Learning Materials" in 2008, the purpose of the preparation of teaching materials is as follows: 1) providing teaching materials in accordance with the demands of the curriculum by considering the needs of students, the teaching materials in accordance with the characteristics and settings or social environment of students, 2) assist students in obtaining alternative teaching materials in addition to textbooks that are sometimes difficult to obtain, 3) facilitate teachers in implementing learning.

2.1.2 Learning Outcomes

Learning outcomes appear as a change of behavior in students that can be observed and measured in the form of changes in knowledge, attitudes, and skills. The change can be interpreted as a better development and improvement compared to the previous one, for example from not knowing to know, polite attitude to be polite and so on (Hamalik, 2007).

Bloom (in Dimyati and Mudjiono, 2006) mentions six types of cognitive domain behavior, as follows: a) Knowledge, achieving memory skills about what has been learned and stored in memory. Knowledge is concerned with facts, events, notions of rules, theories, principles, or methods; b) Understanding, including the ability to grasp meaning and meaning of what is learned; c) Application, including the ability to apply methods and rules to deal with real and new problems; d) Analysis, including the ability to break the unity into parts so that the overall structure can be well understood; e) Synthesis, including the ability to help a new pattern; f) evaluation, including the ability to form an opinion about several things based on certain criteria.

Factors that affect learning outcomes can be two major parts namely internal and external factors.

1. Internal Factors (Physical)

Physical circumstances that need be noticed, first normal physical condition or not have defected since in the womb until after birth. This normal physical condition especially emotion includes the state of the brain, the five senses, limbs. Second, healthy and fresh physical health conditions greatly affect the success of learning. In maintaining physical health, there are some things to note include eating and drinking regularly, exercise and getting enough sleep.

a. Psychological Factors

Psychological factors that affect the success of this study include all things related to one's mental condition. Mental conditions that can support the success of college is a stable and stable mental state. These psychological factors include the following. First is intelligence. Intelligence or the basic level of a person's intelligence is a big influence on one's success. Second, will. Willingness can be said to be the main determinant of a person's learning success. Third is talent. This talent is not determining whether or not someone in a field, but more determine the low and low ability of a person in a field.

2. External Factors

a. Family Environment Factor

Factors of this house or family environment are the first and main environment also in determining the success of one's learning. The atmosphere of the home environme-nt is quite calm; the attention of parents to the development of learning and education of their children will affect the success of learning.

b. School Environmental Factors

The school environment is necessary to determine the success of student learning. The things that most influence students' learning outcomes in schools include teaching methods, curriculum, teacher relationships with students, lessons, school time, discipline or discipline that are consistently and consistently enforced.

c. Community Environmental Focus

A student should be able to choose a community environment that can support the success of learning. Society is an external factor that also affects the results of student learning because of its existence in the community. The environment can also support the success of learning such as non-formal education institutions, such as foreign language courses, test counseling.

2.1.3 Integrated of Spiritual Values in Learning Materials

The 2013 curriculum places spiritual attitudes on the first order of the core competencies of social attitudes in the second order. It can be interpreted that the curriculum is very emphasis on the development of character and personality of students. It can also be interpreted that the development of spiritual attitudes and social attitudes should underlie the development of knowledge and skills in students (Zakariah, 2014). Presenting the spiritual aspect of religion in chemistry/science will not reduce its scientific content but will complement each other and strengthen that will be the means of achieving the faith and taqwa (Darmana, 2012).

The delivery of spiritual values in chemistry lessons can be done through the preparation of learning material that is structured in such a way that spiritual

values are integrated with them (Saputro, 2011). In chemistry there are many lesson materials that contain the values of beauty and order that ultimately lead to the concealment of the creator and if can dig deeper the nature of the meaning behind these chemical events, it will be obtained a lot of values- religious values that are needed by the students as the provision of living in the world (Djudin, 2011).

Integrating spiritual values in learning materials will not reduce the scientific level of science itself, it is even an appropriate effort because it means restoring unity between shari'a and reality (Darmana, 2013). With the integration of religious values to a concept of chemical learning that is salt hydrolysis concept is expected to give a positive influence in order to instill the values of faith and integrate students in science and technology so as to shape and foster a positive attitude of students in everyday life. The combination of science and religion is the right combination of concepts to understand nature (Marssonet, 2012).

According to Darmana (2014), the integration of spiritual values in chemistry materials can be categorized into 3 types, namely:

1. Verification

It is done by matching that the concept/chemical matter has been discussed in a particular Qur'an, although only in terms of terms. This verification is shown when the teacher discusses the topic of "atom" so the chemistry teacher mentions that the Qur'an speaks of the atom in Al-Qur'an sura al-Zalzalah verses 7 and 8 whose free translation is anyone who does good or evil weighing zarrah then Allah will repay him. Furthermore, teachers advise and motivate students to do even the slightest kindness. In this case, it is not clear the linkage between the concept of "atom" in terms of the concept of "zarrah" in the Qur'an but only in terms of the terms where "zarrah" is considered identical to the term "atom".

2. Analogy

The next type is the analogy; the case is shown when the teacher takes a particular Qur'an verse considered analog to explain the concept or chemistry matter. In this case it is shown when the teacher discusses "the path of electrons in the atom" he gives an illustration by mentioning that in the Qur'an, the movement

electrons in an atom such as the movement of the sun in its spin (Saba, 34: 38) which means that the sun circulates in its path. This type of analogy is found in accordance with the opinion of Fuad (Jamaluddin, 2010) which basically reveals that internalization of the value of tauhid/akidah can be done through analogy. The analogy is commonly used to simplify, visualize in order making it easier to understand.

3. Express the wisdom or moral message of the concept/fact of chemistry

The more important development is how to reveal the message/wisdom content of the chemical topic concept for the purpose of creating students' understanding of understanding that reflects the admiration for God's creation, God's Power, God's Power, God's Love and God's Grace which is expected to be the trigger to become God's servant grateful and then pious.

The integration of religious values in textbooks can be done in several ways according to Saputro (2011), namely: 1) Write basmalah sentences in the preface of the book, 2) start each chapter with quotations from Qur'an verses related to the theme or concepts to be discussed, 3) Explain the meaning of quotations of the verses of the Qur'an and related to the desires that will be discussed in the chapter, 4) Provide a description of the reflections on the cases in the discussion of books that can encourage the formation of consciousness and The Greatness of God, such as the formation of water molecules from hydrogen and oxygen atoms, is only possible because of the mercy of Allah, 5) Displays of Muslim scientists who have contributed to the development of science as a way to revive the scientific tradition which has been done by Muslim scientists ancient, 6) Insert words of pearl usually taken from the words of wisdom or hadists of Rasulullah SAW.

2.1.4 Spiritual Attitude

Attitude is a mental outlook or tendency. According to Bruno attitude is a relatively settled tendency to react in a good or bad way against a particular person or item.

Spiritual quotient comes from the word spiritual and quotient. Spiritual means mind, spiritual, religious, whereas quotient or intelligence means perfect the development of reason, intelligence, a sharpness of mind (Shah, 2008).

Spiritual is the relationship between the Almighty and the Creator, depending on the beliefs held by the individual. Spirituality includes aspects of a) relating to the unknown or uncertainty in life, b) finding out the meaning and purpose of life, c) realizing the ability to use the source and strength within oneself, d) having feelings of attachment to oneself and with the Highest.

Some functions of spiritual intelligence of morals and moral education are as one method of moral education and soul coaching. Meanwhile, according to Sukidi (2008), spiritual intelligence to educate the heart and character. True education is the education of the heart, for the education of the heart not only emphasizes aspects of intellectual cognitive knowledge but also fosters psychomotor quality and reflective spiritual awareness in everyday life.

The characteristics of people who have spiritual awareness based on the theory of Zohar and Marshall (2001), namely: 1) Have Self-Awareness, have self-awareness that is a high level of awareness and deep so that can realize the various situations that come and respond, 2) Having a vision of having an understanding of the purpose of life and having a quality of life inspired by vision and values, 3) Being flexible, being flexible is able to adapt spontaneously and actively to achieve good results, have a pragmatic view usefulness), and efficient about reality, 4) Holistic view, holistic view that sees that self and others are interrelated and can see the interrelationship between various things. Being able to look at a larger life so as to be able to face and exploit, overcome misery and sense of health, and see it as a vision and seek meaning behind it, 5) Make Changes, Make changes that are open to difference, have the convenience to work against convention and also become people who are free, 6) Source Inspiration, a source of inspiration that is able to be a source of inspiration for others and have fresh ideas, 7) Self Reflection, self-reflection that has a tendency what is fundamental and principal.

2.1.5 Discovery Learning Model

Discovery is a learning model that was developed based on the views of constructivism. (According to Kurniasih & Sani, 2014) Discovery Learning is defined as a learning process that occurs when learning materials are not presented in final form, but students are expected to organize themselves. Furthermore, (Sani, 2014) discloses that discovery is finding concepts through a series of data or information obtained through observation or experiment. Further statements put forward by (Hosnan, 2014a) that discovery learning is a model for developing an active way of learning by self-discovery, self-investigation, obtained will be faithful and long-lasting in memory. Through learning discovery, Students can also learn to think analysis and try to solve their own problems encountered. Wilcox (in Hosnan, 2014b) states that in learning with discovery, students are encouraged to learn largely through their own active engagement with concepts and principals and teachers encourage students to have experience and experiment that enable them to discover principles for themselves.

Discovery model is a learning that emphasizes the direct experience and importance of understanding the structure or important ideas to a discipline, through active involvement of students in learning. Teaching materials presented in the form of questions or problems to be solved. So students acquire knowledge that has not been known not through notification, but through the discovery itself. Bruner (in Kemendikbud, 2013) argues that learning will work well and creatively if the teacher gives students the opportunity to discover a concept, theory, rule, or understanding through the examples encountered in their lives. Using of discovery learning, want to change the passive learning conditions become active and creative. Change the learning that is teacher oriented to student.

Changing the Expository mode, students only receive the overall information from teacher to discovery mode, students find their own information. Sardiman (in Kemendikbud, 2013) revealed that in applying the discovery learning model, the teacher acts as a mentor by giving the students the opportunity to actively learn, the teacher must be able to guide and direct the learning activities of the students according to the purpose. Following up on some opinions

that have been expressed by the experts, the researcher concludes that the discovery learning model is a learning process where the delivery of the material is presented incompletely and requires students to be actively involved to find the mselves a concept or principle that has not been known.

2.1.5.1 Steps of the Discovery Learning Model

Application of discovery learning model in learning, there are several stages that must d. (Kurniasih & Sani, 2014) suggested the operational steps of the discovery learning model as follows :

a. Step preparation discovery learning model

1) Determining learning goals.
2) Identify the characteristics of students.
3) Select lesson material.
4) Determine the topics students need to learn inductively.
5) Develop learning materials in the form of examples, illustrations, tasks, etc. for students to learn.

b. Procedure application of discovery learning model

1. Stimulation (Provision of Excitatory)

At this stage students are faced with something that causes confusion, then proceeded to not give generalization, in order to arise a desire to investigate itself. Teachers can start by asking questions, reading suggestions, and other lessons that lead to problem-solving.

2. Problem Statement (Problem Identification)

The teacher provides an opportunity for students to identify issues relevant to the subject matter, then one of them is selected and formulated in hypothetical form.

3. Data Collection

These stage students are given the opportunity to gather relevant information, read literature, observe objects, interviews, and conduct their own tests to answer questions or prove whether or not the hypothesis is correct.

4. Data Processing

Data processing is an activity to process data and information that has been obtained by students through interviews, observations and so forth. This stage serves as the formation of concepts and generalizations so that students will gain new knowledge from alternative answers that need to get logical proof.

5. Verification

At this stage students, do an examination carefully to prove whether or not the hypothesis is set with alternative findings and associated with the results of data processing.

6. Generalization (Drawing Conclusions)

The generalization/concluding phase is the process of drawing a conclusion that can serve as a general principle and applies to all the same occurrences or problems, with pay attention results verification. (Sani, 2014)

Suggest stages learning using the discovery learning model, in general, can be described as follows.

As for steps learning with model discovery learning is:

(1) Provide a stimulus to students.

(2) Identify problems relevant to the subject matter, formulate the problem and then determine the temporary answer (hypothesis).

(3) Divide the students into groups for discussion.

(4) Facilitate students in data collection activities, and then process them to prove the answer (hypothesis).

(5) Directing students to draw conclusions based on their observations.

(6) Directing students to communicate their findings.

2.2 Salt Hydrolysis

Salt hydrolysis is a material that is learned in class XI based on the curriculum 2013. This material is important to be mastered and understood students to be able to understand the next chemistry topic.

2.3 Relevant Research

Based on research that combines Islam and chemistry conducted by (Ubaidillah, 2014) about the experiment of chemical high school module insight of integration of Islam-grade X science to cognitive learning result of learners in petroleum material at SMA Muhammadiyah Boarding School Yogyakarta showed good quality module with result of assessment/overall validation of 79.11% with good category. So is the research of (Oksamaria et al., 2016) that the integrated teaching materials of spiritual values developed can foster spiritual values in the students and there is a relationship between the spiritual values to the improvemen t of students' learning outcomes that are taught with integrated chemical materials of spiritual value.

The research related to spiritual values is also done by (Darmana, 2012) researching the hypothesized model of internalization of monotheistic values in science materials (facts, concepts, laws) that are confronted to increase the relative contribution of science learning to the achievement of national educational goals, the results of this study internalization of values tauhid on science material can be done through the disclosure of value/ wisdom/meaning/essence of the science mat erial is based on Islamic point of view.

Darmansyah (2014), pursue the techniques of assessing spiritual and social attitudes in character education with qualitative descriptive analysis, the results of this study indicate there are four models of evaluation of spiritual and social attitudes. (Jumini, 2015) examines the implementation of spiritual education as a method of akhlaq education for students on the concept of the vector with Al-Qur'an approach.

Amri, et al., (2017) also examines the integration of Islamic values in biology learning in Al-Ulum integrated Islamic school Medan also shows in the implementation of integration of Islamic High School Islamic Senior High School Al-Ulum Medan has sufficient supporting capacity such as the existence of MGMP activity which helps in elucidating material-related verses. Similarly, based on the research journal of Faculty of Tarbiyah and Keguruan UIN Ar-Raniry Banda Aceh (2015), it can be concluded that the inquiry model of inter-aligned Qur'anic verses significantly improves students' understanding of the material of buffer solution. Based on observations on the Islamic character of the occurrence of the increase of a set of characters observed with the caring character has the highest value and the character of honesty has the lowest value, so it can be concluded.

The same study was also closely watched by (Fitriani, et al., 2016), Development and Standardization of Integrated Chemical Ingredients Spiritual Va lues For Class XI SMA odd semester Based on the National Education Standards Agency shows the result of standardization found that the integration of spiritual values does not reduce the level of scientific chemistry material developed, so it is expected to the chemistry teacher especially class XI SMA/MA can use integrated teaching materials to help students in achieving CCI and assist teachers in implementing CC1 in the learning process.

Permadi, (2016) also examined the development of science-based IPA module in the integration of Islam and science to improve learning outcomes in the students of grade VI min Seduri Mojokerto can be concluded that the module of IPA based on the integration of Islam and science developed proved significantly effective to improve student learning outcomes. On the other hand, the attractiveness level of students using the module on all components reaches 87% with very interesting criteria. Based on the overall data analysis result, it can be concluded that the IPA module based on Islamic integration and science has fulfilled the element of learning needs, one of them is to improve student learning outcomes.

So it can be concluded based on studies that have been applied to students in schools can increase student learning outcomes significantly, and followed by growing the spiritual attitudes of each student. Then the researchers will conduct research using chemistry learning material integrated of spiritual value by using discovery learning model is expected to be able to increase student learning outcomes not only the cognitive value, but also increasing its spiritual value.

2.4 Hypothesis Research

2.4.1 First Hypothesis Test

Based on the hypothesis test with SPSS 20 For Windows, it was found that there was a difference in student learning outcomes conducted by the Independent Sample T-test which was taught using integrated chemical teaching spiritual values with high school Chemistry textbooks by students through the Discovery Learning learning model to test the following hypothesis:

H_0 : There is no difference in students' learning outcomes taught using chemistry learning materials integrated spiritual values with high school student's handbook through the discovery learning model.

Ha : There is difference in students' learning outcomes taught using chemistry learning materials integrated spiritual values with high school student's handbook through the discovery learning model.

2.4.2 Second Hypothesis Test

To test the second hypothesis that there is a relationship between spiritual values with increased learning outcomes, Correlation is used in the SPSS 20 For Windows program to test the hypothesis as follows:

H_0: There is no relationship between spiritual values in student learning outcomes.
Ha: There is a relationship between spiritual value and student learning outcomes.