## CHAPTER I INTRODUCTION

### 1.1. Background

The rapid development of technology, especially in the world of education. Technology that is increasingly important continues to evolve. In this era, especially in the learning process, there are several tools to make it easier, especially in the world of education. At the time of the spread of the COVID-19 virus which began in 2019, many had an impact on the education process, especially during the teaching and learning process. Because of these circumstances that require students and teachers to carry out the teaching and learning process in a long distance relationship. In the world of education, student motivation is the most important thing in influencing student learning outcomes. Learning is not possible without the motivation to learn. So that learning motivation is the most effective role in the learning process and student learning outcomes. Because students who are motivated may complete any task and attain their objectives. Motivation accelerates labor, and a person will go to great lengths to achieve a goal. Motivation can improve learning achievement because students achieve their tasks which have improved the direction and performance of students, in education motivation affects student success (Bakar, 2014).

Chemistry learning has the main goal of instilling belief in God Almighty based on the existence and natural beauty of His creation which continues to be fought for in various ways. How to realize these goals to be achieved. While in general the chemistry taught is still adapting from other cultures, for example, western culture which is contrary to religious values. Chemistry in Indonesia should be a means of serving Allah (Darmana, 2012). Through video animation media, in conveying religious values, chemical materials are arranged as well as possible so that these values can be integrated in the media. Many religious values are contained in every chemical material that contains the oneness and beauty of the creator. The deeper the chemical material is explored, the more religious values related to life are needed by students as provisions for living in the world. In animated video media that contains religious values, it will not reduce the quality of the scientific level of chemistry itself, in fact it is the right effort because it means restoring the unity between sharia and nature and can shape and foster positive attitudes of students in everyday life (Okmarisa, Darmana, & Suyanti, 2016).

Researchers made observations at Al Ulum Terpadu Islamic Senior High School Medan, and it was found that the learning system at school did not use religious values in conveying material, especially chemical bonds. This fact makes schools need a media that can convey chemical bonding material accompanied by religious values to students. Chemistry has the characteristics of science which contains lessons about natural occurrences and is extensively explained in the Qur'an and hadith. So that by incorporating religious values into the classroom will have a positive impact on students. By introducing students to religious values (spiritual aspects) to students is a way to shape students into human beings who have faith and piety. This makes the use of media have an important role in learning activities. The quality of chemistry itself will not be reduced if it is presented with the integration of religious values, but rather makes students understand more that everything that is discovered by researchers is a predetermined destiny. To build a better student character, it is necessary to have learning delivered with a higher meaning (Aulia, Darmana, & Nugraha, 2021)

In the teaching and learning process using media can help teachers to create an effective learning atmosphere. All materials related to audio-visual have a positive contribution to learning by using them at the right time and place. Video animation is an important learning opportunity for students working in a second language. Narrative text with color images, moving images, and scripts are part of the animated video media that it can provide. One of the media in reading comprehension to help increase students' attention, so that they can be motivated to study narrative texts is the meaning of animated video media. By watching animated videos about narrative text stories in the form of chemical bonding material, students are interested in learning the material (Yusuf, Amin, & Nugrahaningsih, 2017).

High school students have begun to be assessed according to their respective abilities. Chemical bonding is a high school subject that is considered not difficult but misconceptions often occur, because in learning chemistry students experience difficulties which can stem from difficulties in understanding the terms and concepts of chemical bonds. So to overcome this, chemistry lessons need to be presented in a more concrete form, for example with media in the form of animation videos. It is very important for teachers to emphasize mastery of chemical bond concepts and materials. This material was chosen because it includes material that requires a deep understanding of concepts and needs to be studied repeatedly, therefore there is a need for media to facilitate the learning process that students can use at any time.

Previous research on animation video media using PowToon by Anisa Nur Khayati Kafah (2020) revealed that the PowToon-based animation media that has been developed shows that the media can make students have a high sense of learning interest and are able to experience improvements in student learning outcomes (Kafah, Nulhakim, & Pamungkas, 2020). Another research on animation video media by Luxy Grebers Swend Sinaga (2020) reveals that the animation media he developed but uses Adobe Flash shows that the media is very suitable to be used as a learning medium in chemistry learning (Sinaga, 2020). Based on the above background, researchers are interested in conducting research on the "Development of Animation Video Media (PowToon) in Chemistry Learning Based on Religious".

#### **1.2. Identification of Problems**

Based on the description of the background of the problem above, it can be identified that the factors that affect the lack of students in developing their learning motivation include:

- 1. The learning process is still teacher-centered.
- 2. Lack of learning media used in the learning process.
- 3. The teacher only uses the lecture model during the learning process.
- 4. Lack of interaction between teachers and students during learning.

The factors that influence the low student learning outcomes include:

- 1. Lack of interest and motivation of students towards lessons.
- 2. Lack of student concentration during the learning process.
- 3. Lack of student activity in the teaching and learning process.

#### **1.3. Limitation of Problems**

The learning process is still teacher-centered, the lack of media use and the lack of interaction between students and teachers are included in the factors that affect the lack of students in developing their learning motivation. With a lack of interest and motivation as well as student activity towards the lesson resulted in decreased student learning outcomes. This research is limited to the development of religious-based animated video media using PowToon software on chemical bonding material with the 2013 High School Curriculum (Theory, Concepts, Characteristics, Types, Molecular Shape). This study is focused on measuring the feasibility of learning media in the form of religious-based animated videos and their effect on students' motivation and learning outcomes.

## 1.4. Formulation of The Problem

Based on the background of the problem and the problem limitations that have been described, the main problems of this study are as follows:

- 1. How is the feasibility of animation video media (PowToon) in chemistry learning based on religious for senior high schools?
- How is the religiosity level of grade X MIA 1 Al Ulum Terpadu Islamic Senior High School Medan students after using animation video media (PowToon) in chemistry learning based on religious?

- 3. Is there the increase in the learning outcomes of grade X MIA 1 Al Ulum Terpadu Islamic Senior High School Medan students after using animation video media (PowToon) in chemistry learning based on religious?
- 4. Is there the increase in the learning motivation of grade X MIA 1 Al Ulum Terpadu Islamic Senior High School Medan students after using animation video media (PowToon) in chemistry learning based on religious?

## **1.5. Research Objectives**

In connection with the problem formulation above, the objectives of this study consist of :

- 1. To determine the feasibility of animation video media (PowToon) in chemistry learning based on religious for senior high schools.
- To determine the religiosity level of grade X MIA 1 Al Ulum Terpadu Islamic Senior High School Medan students after using animation video media (PowToon) in chemistry learning based on religious.
- To determine the increase of learning outcomes in grade X MIA 1 Al Ulum Terpadu Islamic Senior High School Medan students after using animation video media (PowToon) in chemistry learning based on religious.
- 4. To determine the increase of learning motivation in grade X MIA 1 Al Ulum Terpadu Islamic Senior High School Medan students after using animation video media (PowToon) in chemistry learning based on

# 1.6. Research Contribution

religious.

Through research on "Development of Animation Video Media (PowToon) in Chemistry Learning Based on Religious", there are various kinds of benefits that can be learned both theoretically and practically.

### 1. Theoretically

This research is hoped to be able to add insight and reference for the implementation of learning using media, especially animation video media in chemistry learning based on religious.

#### 2. Practically

a. For Student

This research is expected to provide an initial introduction to learning media in the form of animated videos (PowToon) based on religion on chemical bonding material. Provide new knowledge, introduce scientific work procedures, increase student motivation and student learning outcomes. In addition, students can learn according to their own abilities.

b. For Teachers

The use of religious-based animation video media is expected to be used as an alternative chemistry learning media guided by innovative religious values to improve the quality of learning according to the demands of the curriculum and the development of science and technology. Can be used as a means to improve the learning process more effectively and to develop and innovate learning.

c. For Schools

This research is expected to contribute to the improvement of the learning system in schools by developing skills in using animation video media (PowToon) based on religious in accordance with the demands of the development of science and technology in the field of education as an improvement in the quality of the learning process. Can be used as material for consideration and reference in order to maximize learning resources, learning motivation and student learning outcomes.

d. For Researchers

It is hoped that this animation video media (PowToon) based on religious can provide new experiences to develop learning innovations so that they have an impact on the quality of education.

## **1.7. Operational Definition**

In order to avoid misunderstandings in interpreting the terms, some of the terms used in this study can be defined as follows :

- a. *Learning motivation* is a way in the form of encouragement from within oneself to take an action in a certain way in accordance with the planned goals. With the motivation to make the individual to do something and help the individual in solving problems within himself.
- b. *Learning outcomes* is an ability possessed by a student after the student receives a learning experience from the teaching and learning process. To find out the results of student learning abilities, learning outcomes can be viewed as a form of activity that can make this happen.
- c. *PowToon* is a web-based tool that allows you to build a smooth, logical flow animation display using a wide range of material, graphics, cartoons, and animated images. It's also the account option for project-based learning in the classroom.
- d. *Animation video media* is a medium that can combine audio and visual to attract students' attention, can present objects in detail and can help students understand more difficult lessons.
- e. *Religious values* are values regarding the concept of religious or religious life in the form of bonds or relationships that regulate humans and their God.
- f. *Religiosity* is something that can encourage a person to have behavior that is in accordance with his own level of obedience and that trait is in himself.

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