The Strengthening of Character in Boarding Schools Based Technology in Lhokseumawe, Northern Aceh Indonesia

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ABSTRACT: This study examines Strengthening Character Education School Boarding School Based On Technology in the city of Lhokseumawe. The main object of this research focused on four boarding school that: 1. Dayah Tahfiidzul Qur'an Al-Markazul Islami atau Islamic Centre Boarding School, 2. Dayah Modern Yapena (DAMORA), 3. Dayah Ulumul Ulum Boarding School and 4. Dayah Ihyaussunnah Boarding School. The focus of this research is to strengthen the character by using technology, in this study technology is used as a tool to change behavior (behavior), where the change is born from the learning process because of the stimulus, response and conditioning so that the action (habit of the action), using technology, this stimulus will continuously be repeated automatically. The research approach used is qualitative, the research method used is descriptive, there are primary and secondary data sources. Data collection is done by interview, observation and observation using data collection instruments (IPD), data gathering is done by reduction, display, triangulation, verification. The results showed the use of technology in an effort to build the character of students suppression of behavior by giving stimuli through technology. As the use of Running text, which reads various forms of words of advice. The use of LED television in public places that play about films that contain characters. Use of the LCD for playback of films successful people, loudspeakers to remind time automatically and repeatedly, use android system in learning, the use of this android when the students are on vacation / at home, reminding them through WAG, instagram, facebook groups. The characters that are constantly stimulated, emphasized and conditioned are disciplines, honesty, hard work, creative, love the motherland, love to read, care socially, and care for the environment.

Keywords: Character Education, Boarding school, Technology.

1. INTRODUCTION

In the current era of globalization, formal educational institutions have a very important task in preparing quality Indonesian human resources (HR) in the future. Education plays a very important role in the process of improving the quality of human resources who are knowledgeable and have good character. Character education is a continuous and never-ending process, as long as humans are still alive on this earth. [1] Character education is the introduction of values conveyed through learning and exemplary given to students in education units, so that students can express themselves in the community according to the culture and values that apply to that community.

Education according to Law Number 20 Year 2003 is a conscious effort that is deliberately designed to achieve predetermined goals. [2] Education aims to improve the quality of human resources so that they are able to face various challenges and the times. National Education System Law No. 20 of 2003 states that national education functions to develop abilities and shape the character and civilization of a nation with dignity in order to educate the nation's life, national education aims to develop the potential of students to become human beings who believe and fear God Almighty, noble, healthy knowledgeable, competent, creative, independent, become democratic, and responsible citizens. [3] However, the meaning of education like this has been obscured by the fact that education only emphasizes the cognitive-theoretical-academic aspects. School seems to be just a factory producing certified humans. [4] The aim of education is obsessed with preparing smart and competitive Indonesians in certain fields by leaving human values and national culture. [5] In fact, the existence of Islamic Religious Education (PAI) and Pancasila Moral Education (PMP) subjects, which are expected to foster national morality and behavior, is only theoretically given. Research done by Afiyah et al towards PAI, in which there is moral material, shows that PAI tends to be given for enrichment of knowledge (cognitive). [6] Akhlaq is used as knowledge, not something that is done. A child who knows the religious viewpoint of adultery and can memorize the arguments about adultery, is still...
graduated even though he does activities to approach adultery openly (such as dating). The reason is none other than because students are only taught to know good and bad cognitively, not required to carry out this knowledge. [7]

Technology, which is a tool in human life, always changes from time to time, even changes in its development from manual use to soft digital can change quickly. Technology cannot be separated from humans. In the world of education, technology is needed and has its own role in the teaching and learning process. Thinking that technology is one of the solutions to improve the quality of education is not wrong. Technology is supposed to play such a role. The results of technology have long been used in education. Several human creations in the form of paper, printing / photocopy machines, radios, televisions, computers, cellphones, projectors which are now called Infocus, all of these are currently used in education. In essence, these tools are not made specifically for education, but as the demands of the times these tools have turned out to be the main material in carrying out teaching and learning activities.

Based on the description above, the writer tries to study "Technology-Based Character Education at the Boarding School in Lhokseumawe City".

2. RESEARCH METHOD

2.1 Types of research

This research is a field study using qualitative methods. Qualitative research is a type of inquiry that aims to understand the role of groups or interactions in certain social situations. [8] This research was conducted directly in the field, and problem formulations were also found in the field. In addition, this research starts from an inductive way of thinking, then thinks deductively, and considers data as theoretical inspiration, then moves to form a theory that explains the data. [9]

There are several research approaches that exist in qualitative research, but the authors prefer a descriptive research approach. Descriptive research is a research method that seeks to describe and interpret objects according to what is there. [10] The reason the writer uses this type of descriptive research is because the writer will systematically describe the facts and characteristics of the object or subject being studied appropriately and report the state of the object or subject under study in accordance with the reality that occurs in the field.

2.2 Data collection technique

Data was collected through review of documentation, in-depth interviews, participant observation and review of documentation.

2.2.1 Document Review

Document review is used to obtain data related to theory and related to the focus of this research, such as admissions of the institution, curriculum, student / student and teacher data, vision and mission, short-term and long-term programs and other documents related to the research focus.

2.2.2 Observation

Observation is a technique in collecting data by directly observing the characteristics of the population to obtain actual and subjective data and to strengthen the data obtained through interviews. The object of observation is the condition and situation of the student / santri moral development process, which consists of curriculum preparation, use of media and learning methods and supporting technology.

2.2.3 Interview

The interview is a data collection tool by interviewing someone with direct and face-to-face conversations. So in this study, interviews will be conducted with leaders, teachers and students, with the hope that the authors can obtain more convincing data, because they deal directly with respondents.

2.3 Data Analysis Technique

All data that has been obtained from various previous data collection techniques will be analyzed using the following stages:

2.3.1 Reduction Stage

This stage is carried out to examine all the data that has been collected from the field, so that the main points of the object to be studied can be found. This activity is carried out to collect data or information from notes from interviews, observations and documentary studies to find core values or points that are considered important from each aspect under study.

2.3.2 Display Stage

This stage is carried out to embrace the data findings in this study, which are arranged systematically to find out what is being studied in the field, so that through data display techniques it can make it easier for researchers to interpret the collected data.

2.3.3 Data Verification

Taking conclusions is an advanced analysis of data reduction and data display so that the data can be concluded, and the researcher still has the opportunity to receive input. After the three data analysis
processes were carried out by testing the correctness of the data, then the researchers drew conclusions in descriptive form as a research report.

2.4 Data Source
The data sources for this research are as follows:

2.4.1 Primary Data Sources
Primary data sources, namely data sources used as the main data in this study, obtained from observations and interviews. The determination of informants was done purposively. The primary data that the authors make in collecting data in this study can be seen in the following table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Position</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School leaders/principals</td>
<td>6 people</td>
</tr>
<tr>
<td>2</td>
<td>Teachers</td>
<td>12 people</td>
</tr>
<tr>
<td>3</td>
<td>Students/Santri</td>
<td>12 people</td>
</tr>
</tbody>
</table>

2.4.2 Secondary Data Sources
Secondary data sources are complementary data to support this research which is obtained from archives, admissions, curriculum, student and teacher data, vision and mission, short-term programs and long-term programs for books or journals and other sources related to research. But besides that, there are also other data to complement secondary data from community leaders and scholars.

2.5 Research Sites
TABEL 2. The locations to be sampled in this study are as follows:

<table>
<thead>
<tr>
<th>NO</th>
<th>NAMA LEMBAGA</th>
<th>ALAMAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Islamic Centre Boarding School</td>
<td>Lhokseumawe</td>
</tr>
<tr>
<td>2</td>
<td>Dayah Modern Yapena (DAMORA)</td>
<td>Lhokseumawe</td>
</tr>
<tr>
<td>3</td>
<td>Ulumuddin Boarding School</td>
<td>Lhokseumawe</td>
</tr>
<tr>
<td>4</td>
<td>Modern Ihyaaussunnah Boarding School</td>
<td>Lhokseumawe</td>
</tr>
</tbody>
</table>

3. RESULT AND DISCUSSION
The moral development of Acehnese santri has followed the world’s development trends by using technology as a medium of learning and moral development of students.

The author took the location of this research in the city of Lhokseumawe, Aceh Province. There are 4 (four) schools based on boarding schools which the author used as research material, as described in the research location. The technologies commonly used in boarding schools are as follows:

3.1 Use of Computer
Strengthening religious morals has many mandatory activities for santri. So that pesantren caregivers need the support of technological tools in all of them. One of them is the use of computers that are familiar in people's lives. The function of computers in strengthening the morals of students / santri in pesantren educational institutions is to compile reports and design moral improvement programs and also to increase the movement of students / students in the complex. From several institutions that the author conducted research, including the Islamic Center Boarding School Lhokseumawe. This institution, asatiz, carries out moral strengthening every day by compiling daily reports based on joint supervision.

Based on the results of an interview that the author conducted with one of the asatiz at the Islamic Center Boarding School Lhokseumawe, stated that “teachers are given the mandate and responsibility to control the movement of students/santri, for example during the 5 daily prayers, they are divided into small groups of 15 people to be cared for directly by 1 person asatiz, the pattern of care that is applied is to at least keep their obligatory deeds from being shifted from the predetermined time, for example the midday prayer with the lunch schedule so as not to clash, and so on”.

In this case the students are required to be able to perform the 5 prayers in congregation either in the mosque or in their respective dormitories. They perform Fajr and Maghrib prayers in congregation in the mosque while dzuhur, Asr and Isha they do it in their respective dormitories and are always monitored by their direct caregivers in the dorms who are seniors who have entered the pesantren earlier. And after monitoring has been done all day long, this caregiver makes daily reports using a computer to be recapitulated every week.

This is different from what was done in other institutions. For example, Moral education at Ihyaaussunnah Islamic Boarding School Lhokseumawe. Teachers use computers in the pesantren complex to write tausiah materials. Strengthening the morals of students at the Ihyaaussunnah Islamic Boarding School Lhokseumawe is carried out by conveying spiritual sermons or tausiah after the 5 time fardhu prayers led by Ustaz.

In addition, the use of computers is to write the rules at the Ihyaaussunnah Islamic Boarding School Lhokseumawe as part of strengthening the morals of students. From the results of the recognition of the teacher council at the Ihyaaussunnah Islamic Boarding School Lhokseumawe complex, it is that "the students are taught to be disciplined and neat before entering the learning classroom and have a strong desire to learn all guided by Ustaz and teachers. The students make it a habit to always pray before and after studying, led by the students themselves, Utadz also urges the students to clean the study room and take care of the learning facilities so
that other students can use it. These are all standard and written rules using computer facilities ".

Another case is done at the Ulumuddin Islamic Boarding School, that strengthening morals by using computer technology to store all files and moral content which will later be managed by the teacher's council via the internet and social media. Ummi Rosimah, Ustazah and Caregivers of Dayah Ulumuddin Boarding School Lhokseumawe explained to us that strengthening the morals of students does not only focus on learning alone, but in an era that is increasingly sophisticated with the development of technological tools, it is fitting for educators to use computer facilities to support the learning process and the learning process. also not only face to face in class, but can be done by utilizing social media in the distribution of moral content, so that it can be enjoyed by the wider community.

The use of computers as a technological tool in supporting learning activities has been going on for dozens of years. The same is the case with the moral development of students / santri in boarding school-based schools in Aceh. Computers have become a primary need in applying every program, and it can be ascertained that if an educational institution does not have computer technology, then it is certain that the institution is not qualified.

3.2 Use of Television

Television is part of technological advances in Indonesia. TV is generally used for entertainment and looking for actual news information. TV can change a society's culture, from living a life full of civilization to having a glamorous life. Whereas on the one hand, TV actors only live in an area that is far from the corner of a big city, but because TV channels are broadcasting world developments, it is very easy to change the behavior patterns of rural communities in remote villages. So that the majority of TV shows can be considered uncivilized in educating the nation's next generation.

However starting in the 90's, government TV was introduced in educational institutions. The use of TV in educational institutions has changed from entertainment facilities to educational media for the development of students. There are several TV channels that have provided educational programs for school-age children. So that parents can direct their children to watch programs that offer higher quality educational values.

The development of TV from year to year is increasingly synergistic with educational goals. So that in recent years TV has also entered the world of pesantren. The author had made observations at several Boarding School-based schools and several Islamic boarding schools in Aceh, that several TV units had been found in the corners of the school complex and the pesantren complex.

One of the pesantren that is the object of the author's research is the Modern Dayah of Arun Education Foundation (Damora YAPENA) Arun, Lhokseumawe. In the complex of this institution, there are 2 TV stations on display for the students to watch, one unit in the male complex, and one in the female complex. One of the ustaz who was interviewed was Ustaz Faizal, a teacher / ustaz caretaker of students at the Arun Integrated Islamic Boarding School (YAPENA Boarding School) Lhokseumawe, "he said that the existence of TV in the YAPENA Arun Islamic boarding school complex has been going on for a long time since 2007. The TV we are standing on here has been. through several stages of censorship and with clear rules, one of the rules is, the TV will turn on at the santri meal time and 17.00 in the afternoon before the evening schedule, apart from that time, the TV will be turned off. But from time to time the TV here will live by presenting the profile of the YAPENA pesantren if there are important guests visiting this pesantren complex ".

The pesantren manager has made several video shows which are shown from time to time when there are important guests. This is very common in several private institutions as a form of conveying information to guests.

On the other hand, TV can also be useful for presenting Islamic documentary films that can be watched by students, this program is one of the daily activities of students in the Matangglumpangdua Matangglmangpandua Bireuen Aceh Integrated Islamic Boarding School complex. In fact, based on the writer's observations, the existence of TV in the pesantren complex has become a medium for strengthening the memorization of the Alquran for students. This is in accordance with what Ustadz Subhan had conveyed to the author, that he stated the existence of TV here as a medium for learning tahfidhul Qur'an, every day we present the memorization of letter juz 30 for students in spare times, with the hope that the verse of the Koran which is often heard by students when presented on TV will make it easier for students who are memorizing without opening the Alquran anymore, because on the TV screen, besides being able to hear the chanting of the verses of the Qur'an, students can also see directly verse by verse so that easily know where the position occurs mad in a verse ".

According to the author's analysis, the existence and development of technology such as TV does not always have a negative impact, as long as these tools can be used on the educational side. As has been done by Pesantren Almuslim, it needs to be exemplified by other institutions.

In addition to the use of TV by the Dayah Tahfiidzul Qur'an Al-Markazul Islam or Islamic
Center Boarding School for the purposes of tahfidhul Qur'an, there is one Islamic boarding school in Aceh that uses TV to play documentary films containing the history of the Apostles, stories friends, and the stories of righteous people. This happened in one of the Dayah Modern Ihyaaussunnah Boarding School pesantren. The author once conducted an interview with the leader of the pesantren, Abi Rizal, where the results of his confession "that once a month the pesantren manager invites his students to do digital tafakkur, by watching TV programs played by the pesantren manager, in the form of historical films of the previous prophets, so after the students watched it they were obliged to make their own narrative or conclusion, the results of the conclusions would be competed and given prizes for those who had splendid presentations".

The more capable the pesantren manager is to design technology for the benefit of moral education, the easier it will be for the students to morally match the desired design, so that pesantren graduates will have more prominent morals compared to graduates of other educational institutions out there.

### 3.3 Tape Recorder

Audio or voice learning media is one of the multimedia-based technology learning media that is quite widely applied in learning. Learning using audio learning media is able to facilitate students to achieve the learning objectives that have been planned. Not only that, there are also several skills that students can achieve in learning using audio learning media. It is not surprising, indeed, because the use of sound-based learning media requires the use of the sense of hearing to grasp the main material, even the skills obtained can be better than learning using printed learning media.

The use of audio learning media demands high attention at the time of use. This is able to build some extra skills in students who use their attention in learning using audio learning media. Students are required to be able to use the sense of hearing properly so that extra attention needs to be used.

One of the audio-based learning media is Tape Recorder. Tape Recorder is able to record sound which can present learning material in audio form. Tape Recorder can be used quite easily, player tools are also very easy to find and easy to use, usually a tape recorder is also equipped with a voice recording facility so that the production or presentation of material through this type of learning media can also be done independently.

Since the 90s the use of the Tape Recorder has been introduced to Arabic and English learning materials, and recently in the Tahfidhul Quran program in each Islamic Boarding School, the voices of Arabic and English conversations have been heard from a tape recorder throughout the corner of the schools. This is in line with what was conveyed by one of the ustaz at the Jeumala Amal Islamic Boarding School, that the Arabic and English language caregivers at the Jeumala Amal Islamic boarding school have long used a tape recorder for the tasmi 'process for students, we are sure that using a tape recorder in a language program will add power. Remember the students in memorizing vocabulary and hiwar (conversation).

In addition to the Ulumuddin Boarding School which uses a tape recorder as a form of language development, Modern Ihyaaussunnah Boarding School as a Boarding School institution also uses a Tape Recorder for the Tahfidhul Quran program. According to one Ustaz who carries out the Tahfidhul Quran program, "every Fajr and evening, we always turn on the tahfidhul qu'ran cassette by using a loudspeaker, so that the chanting of the verses of the Quran becomes a great solution to memorise verses that have already in their memory".

### 3.4 Use of Infocus

The use of LCD projectors in the teaching and learning process uses a computer as an intermediary. Several preparations that must be prepared to make the connectivity work with additional equipment such as: data cable, wireless, and power supply.

Through the learning process, the process of receiving information occurs when students receive lessons. The process of storing information occurs when students have to memorize, understand, and digest lessons. Meanwhile, the process of rediscovering information occurs when students take exams or when students have to apply the knowledge they have to solve problems faced in everyday life.

Using LCD projectors in developing the morals of students in Islamic boarding schools brings benefits, among others, in the delivery of learning information. The most information received by students is through the sense of hearing and sight. This multimedia concept can facilitate transformation and make learning more effective. Judging from the students, the difficulties that can arise in learning are in terms of language use, difficulty memorizing and repeating, until there is disinterest in the lesson.

Based on the results of a discussion with one of the teachers at Dayah Tahfiidzul Qu'ran Al-Markazul Islami or the Islamic Center Boarding School and Dayah Modern Yapena, the two boardings already have an infocus in each study room. That in order to maximize the moral attitude of the students, we use the LCD to display videos and other images that contain exemplary stories of the previous prophets in the hope that they can emulate them in their behavior in their daily lives. Because the moral development of students who live in the complex is not only through the process of learning theory, but there are figures who can inspire them to do good, whether it is
exemplified from the Prophet, the previous prophets or from the figure of his teacher. So through the audio visual performance, it is hoped that the guidance and moral development of the students can run successfully”.

Media LCD projectors in the teaching and learning process can be further developed in order to optimize learning objectives. It is hoped that there will be benefits, including more productive, effective, actual, and even education. LCD projectors are also a teaching aid, meaning that this media depends on the teaching of educators.

3.5 Smartphone

Rapid technological advances are now reaching all corners. Previously, technological advances were synonymous with facilities owned by urban people, but now these technological advances can easily be enjoyed by people in various parts of the village. This provides various facilities for people's lives in all fields, one of which is the use of smartphones in education.

The presence of smartphones that can be easily purchased is an alternative to the limited learning resources for teachers and students. Previously, learning resources only focused on limited printed books, now this limitation can be overcome with the e-Book feature on smartphones. Various books as learning resources for teachers and students can be downloaded easily to be used as learning resources. To enjoy this feature, we only need to add or install an e-book reader such as Adobe PDF Reader and the like.

Apart from e-books, we can also take advantage of other learning resources, namely the internet. With the ease of accessing the internet via smartphones, teachers and students can explore the world of knowledge freely. Lots of websites that provide e-learning facilities, such as Moodle-based learning websites. With e-learning, the limitations of space and time in learning can be overcome, so that learning is now not only in classrooms during class hours, but can take place anytime and anywhere.

Apart from these conveniences, various applications can be obtained by teachers and students to support learning. Teachers at the pesantren can share inspirational writings that can be shared with the students via WhatsApp messages. This is in accordance with what was said by the leader of the Lhokseumawe Islamic Center, that the use of smartphones for those of us who live in Islamic boarding schools is very useful, among others, is that when we enter Islamic messages, we can share with each other so that the contents of the message can be shared by teachers to a number of students and hopefully the students can take it as a lesson in developing their personal personality and character. Apart from that, through the Instagram media on our smartphones, there are also short video content, which sometimes can be watched by some students.”

4. CONCLUSION

Strengthening moral education for students in Islamic boarding schools and boarding schools has used technological media to achieve goals. Looking at 20 years ago, maybe the moral development in pesantren still uses the lecture and reading method. But over time, educational institutions continue to keep up with the flow of changes that can make it easier for educators and students to receive material.

From the results of the research, there are several technologies used by several schools and Islamic boarding schools in the development of morals for their students, including computer technology, TV, Tape Recorder, LCD / Infocus, smart phones.

The results of the research with the team, 95% of boarding school and pesantren-based school institutions use technology media in the learning process, be it computers, infocus, tape recorders, TV and so on. So that it is very easy for teachers and institutional managers to see the results.

REFERENCES

[7] Ratna Megawangi, Pendidikan Karakter: Solusi Yang Tepat Untuk Membangun Bangsa, (Jakarta: Indonesia Heritage Foundation, 2009), hlm. 7.
[8] Lexi Moleong, Metode Penelitian Kualitatif, (Bandung: Remaja Rosda Karya, 2001), h. 94.