

Ahmad Dahlan Thoughts Through *Al-Ma'un* and Higher Order Thinking Skill (HOTS) in Education: Is It Relevance?

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Abstract: This research seeks to determine the significance of Higher-Order Thinking Skills (HOTS) learning in the *Al-Ma'un* philosophy, as KH Ahmad Dahlan taught. The method employed is a literature review, with data collected from literature relevant to the theme of KH Ahmad Dahlan and Higher-Order Thinking Skills (HOTS) learning. The data is then analyzed thematically and processed using an inductive method. According to the findings, KH Ahmad Dahlan taught *Al-Ma'un* to his students, which is similar to Higher-Order Thinking Skills or HOTS nowadays.

Keywords: Education; HOTS; *Al-Ma'un*; Ahmad Dahlan

INTRODUCTION

Indonesia's education throughout its history has produced notable figures. KH Ahmad Dahlan is one of Indonesia's education luminaries who helped pioneer education in the country. Although KH Ahmad Dahlan is most known as the founder of Muhammadiyah, he also made significant contributions to education.¹ During the Dutch colonial period, he was a pioneer in the establishment of indigenous community schools. The school that he pioneered was the first school for the indigenous people, the school integrated the concept of a western-style school with Islamic boarding school education, which taught material on science and technology and classical Islamic science. The education he developed was then referred to as progressive education.²

KH Ahmad Dahlan's intersection with various reform groups also strengthened his reform in the field of education. The innovation that KH Ahmad Dahlan gave was fruitful, giving birth to a new education system that is close to the needs of the people and its alignment with the lower classes/*mustad'afin*.³ The education that he

¹ Ilham Yuli Isdiyanto, Fauzan Muhammadiyah, and Umair Fahmiddin, "Tracing the Roots of Muhammadiyah Thought on the Concepts of Dār Al-Ahdi Wa Al-Syahadah," *Legality: Jurnal Ilmiah Hukum* 30, no. 1 (April 27, 2022): 147–65, <https://doi.org/10.22219/ljih.v30i1.20661>.

² Mohammad Ali, "Paradigma Pendidikan Berkemajuan: Teori Dan Praksis Pendidikan Progresif Religius KH Ahmad Dahlan," *Suara Muhammadiyah* (Yogyakarta, 2017), <https://web.suaramuhammadiyah.id/2018/07/15/paradigma-pendidikan-berkemajuan-kiai-dahlan/>.

³ Nuur Wachid Abdul Majid, "Pendidikan Berkemajuan: Konsep Pemikiran KH Ahmad Dahlan Dalam Menghadapi Era Multidigital," *Muhammadiyah*, 2018, <http://arsip.muhammadiyah.or.id/id/artikel->

pioneered greatly revolutionized the education system at that time. An effort to integrate the pesantren system which is entirely religious with western educational methods through the use of tables and chairs as well as the content of general knowledge gave birth to the first Islamic school for the indigenous people under the name of Madrasah Ibtidaiyah Diniyah Islamiyah.

The concept of education of a figure cannot be separated from his mind in formulating the world of education. KH Ahmad Dahlan is a person who is better known through his charity than through his writings. Even though KH Ahmad Dahlan is a charitable person, he still has a strong foundation of thought in stepping. Netherlands scholar Karel Steebrink said: "He is not a theorist in the field of religion. He is more pragmatic who often emphasizes: less talk and more work". KH Ahmad Dahlan's journey in pioneering education was not easy, there was a phenomenal interesting incident when KH Ahmad Dahlan taught Surah Al-Ma'un to his students. Once KH Ahmad Dahlan taught the letter Al-Ma'un to his students repeatedly until his students got bored. Then he told the student to practice the letter that they had memorized through his action to the poor and orphans, as part of education, according to Junus Salam the event was known as "geger Al-Ma'un". Al-Ma'un itself is a letter that has a very deep meaning and contains educational values. By KH Ahmad Dahlan, the intelligence of reason interprets Al-Ma'un at that time proved to be successful in giving birth to social institutions such as Orphanages and Poor.⁴

Nowadays we are faced with a new era which is often referred to as the era of the industrial revolution 4.0. The Industrial Revolution era, according to Scwab, is a concept that changes human life. The industrial revolution is a series of major changes in the industrial world that then affect human life. The wide influence of the industrial revolution on several sectors has also presented a new phenomenon, including in education giving birth to education 4.0. The education 4.0 is an integration of the physical and cyber worlds in the world of learning. However, more broadly than that, education 4.0 is a response born from the industrial revolution that tries to harmonize humans and machines so that they can solve problems and provide solutions, as well as give rise to new innovations. So, in education 4.0, students must improve the quality of thinking, one of which is through learning *Higher Order Thinking Skill* (HOTS).⁵

Higher Order Thinking Skill or HOTS describes a higher-level cognitive thinking process developed from a variety of cognitive concepts and methods and learning taxonomy such as problem solving, Bloom's taxonomy. Saputra also added that the purpose of higher order thinking skills is an effort to improve students' thinking skills at a higher level, especially related to the ability to think critically in receiving various information, think creatively in solving a problem using the knowledge they have, and make decisions in complex situations.⁶

pendidikan-berkemajuan-konsep-pemikiran-kh-ahmad-dahlan-dalam-menghadapi-era-multidigital-detail-984.html.

⁴ Ahmad Amin Agustiar, "Relevansi Pembelajaran Higher Order Thinking Skill (HOTS) Dalam Peristiwa Geger Al-Ma'un Kh Ahmad Dahlan" (Surakarta, 2020), chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://eprints.ums.ac.id/85968/11/NASKAH PUBLIKASI.pdf.

⁵ Md. Nasir Masran and Asna Zainatulnufus Esha, "Application of Higher Order Thinking Skills (HOTS) in Teaching and Learning Process in Islamic Education," *Advanced Science Letters* 24, no. 7 (May 2, 2018): 5326–29, <https://doi.org/10.1166/ASL.2018.11727>.

⁶ Hatta Saputra, *Pengembangan Mutu Pendidikan Menuju Era Global: Penguatan Mutu Pembelajaran*

METHOD

The methodology employed in this study is Library Research, with data collected in the form of texts or manuscripts acquired from literary treasures.⁷ In this study, the researcher combined the study of character thinking with textbook analysis. Research data in the form of books and articles about progressive education and the industrial revolution 4.0. The documentation method is used to collect data,⁸ which is then thematically analysed using a historical philosophical approach.⁹ The validity of the data in this study uses credibility, transferability, and confirmability.

RESULTS AND DISCUSSION

The Industrial Revolution, History & Education 4.0

The Industrial Revolution 4.0 is the name of the latest automation and data exchange trends in factory technology.¹⁰ This term includes cyber-optical systems, *internet of thing*, and public computing. The Industrial Revolution 4.0 is characterized by digitalization, globalization and demographic changes that change many things in life, culture and society. The idea of the industrial revolution 4.0 was first popularized by Professor Klas Schwab through a book he wrote "*The Fourth Industrial Revolution*".¹¹

The Industrial Revolution 4.0 is a series of major and radical changes in the industrial world. It is recorded that there have been three industrial revolutions that have taken place. The first Industrial Revolution or 1.0 occurred between the period of 1760's and 1840's, this period was marked by the invention of the steam engine. The invention of this machine began industrialization in the United Kingdom and spread throughout Europe and America. The next period is the Industrial Revolution 2.0 which is a continuation of the previous period. The industrial revolution 2.0 is marked by the development of electrical technology. Electrification in the industrial world is increasing the production of goods more efficiently.¹²

Dengan Penerapan HOTS (*High Order Thinking Skills*), 1st ed. (Bandung: Smile`s Publishing, 2018), <http://library.usd.ac.id/web/index.php?pilih=search&p=1&q=0000136800&go=Detail>.

⁷ Sholahuddin Al-Fatih, *Perkembangan Metode Penelitian Hukum Di Indonesia - Sholahuddin Al-Fatih - Google Buku*, 1st ed., vol. 1 (Malang: UMM Press, 2023), https://books.google.co.id/books/about/Perkembangan_Metode_Penelitian_Hukum_di.html?id=EOBiEAAAQBAJ&redir_esc=y.

⁸ Hilman Djafar et al., "Qualitative and Quantitative Paradigm Constellation In Educational Research Methodology," *International Journal of Educational Research & Social Sciences* 2, no. 2 (2021): 339–45, <https://doi.org/10.51601/ijersc.v2i2.70>.

⁹ Ahmad Fauzi and Ika Wahyu Pradipta, "Research Methods and Data Analysis Techniques in Education Articles Published by Indonesian Biology Educational Journals," *JPBI (Jurnal Pendidikan Biologi Indonesia)* 4, no. 2 (2018): 123–34, <https://doi.org/10.22219/jpbi.v4i2.5889>.

¹⁰ Zaka Firma Aditya and Sholahuddin Al-Fatih, "Indonesian Constitutional Rights: Expressing and Purposing Opinions on the Internet," *International Journal of Human Rights* 25, no. 9 (2021): 1395–1419, <https://doi.org/10.1080/13642987.2020.1826450>.

¹¹ Mario Hermann, Tobias Pentek, and Boris Otto, "Design Principles for Industrie 4.0 Scenarios," *Proceedings of the Annual Hawaii International Conference on System Sciences* 2016-March (March 7, 2016): 3928–37, <https://doi.org/10.1109/HICSS.2016.488>.

¹² Halifa Haqqi and Hasna Wijayanti, *Revolusi Industri 4.0 Di Tengah Society 5.0* (Yogyakarta: Quadrant, 2019).

Considerable changes occurred during the birth of the industrial revolution 3.0. This era is also beginning to develop digitalization which is supported by the presence of electronic equipment. In this phase, the basics of digitalization, the internet and automation began to be developed. The era that followed was followed by the industrial revolution 4.0, which was the maturation of the structure in the previous era. This era is marked by the connectivity of the physical world with the digital world through the presence of Internet technology. The four main components in the industrial revolution 4.0 are: *Cyber Physical System, Internet of Thing, internet of Service, and Smart Factory*.¹³

Industrial revolution 4.0, then transform into education 4.0. Education 4.0 is a general term used by experts to describe various ways of incorporating cyber technology both physically and indirectly into learning. Education 4.0 is a phenomenon that responds to the needs of the emergence of the fourth industrial revolution in which humans and machines are harmonized to get solutions, solve and of course find new innovation possibilities.¹⁴ The rapid development of technology makes the jobs done by humans can be done by technology such as robots. Key technologies such as *Internet of Thing, Internet of Service, or Smart Factory* who have been present are in fact able to help human work.¹⁵ Fears of a shift in the role of humans are being replaced by robots and artificial intelligence. So it has become an educational task in forming resources that have skills that are in accordance with the demands of the times, and making human resources whose role cannot be replaced by robots.¹⁶

Education 4.0 is the answer to the problems that may arise in response to researchers' concerns about human existence. To face these challenges, skills that strengthen existence are needed. One of the abilities that must be met is high-level thinking (*Higher Order Thinking Skill*). This ability is necessary to be able to study a problem and use it in a new situation.¹⁷

Higher Order Thinking Skill (HOTS) & Progressive Education

Higher order thinking skills cannot be separated from the level of classification of thinking according to Benjamin S. Bloom (Bloom Taxonomy).¹⁸ Through Bloom's Taxonomy, he divides intelligence into six stages, three levels are reduced called Lower Order Thinking Skill and the highest three levels are called Higher Order

¹³ Hermann, Pentek, and Otto, "Design Principles for Industrie 4.0 Scenarios."

¹⁴ Astuti, S. B. Waluya, and M. Asikin, "Strategi Pembelajaran Dalam Menghadapi Tantangan Era Revolusi Industri 4.0," in *Seminar Nasional Pascasarjana 2019* (Semarang: UNNES, 2019), 469–73, <https://proceeding.unnes.ac.id/index.php/snpsca/article/view/327>.

¹⁵ D Devianta, "Saat Peran Manusia Digantikan 'Robot' Di Masa Depan," *Liputan 6*, 2018, <https://www.liputan6.com/regional/read/3645888/saat-peran-manusia-digantikan-robot-di-masa-depan>.

¹⁶ Ahmad Rosidi, "Pendidikan Dan Kebudayaan Ki Hajar Dewantara Dalam Perspektif Pendidikan Islam," *Institutional Repository UIN Sunan Kalijaga Yogyakarta*, 2016, <https://digilib.uin-suka.ac.id/id/eprint/20314/>.

¹⁷ Husna Nur Dinni, "HOTS (High Order Thinking Skills) Dan Kaitannya Dengan Kemampuan Literasi Matematika," *PRISMA, Prosiding Seminar Nasional Matematika 1* (2018): 170–76, <https://journal.unnes.ac.id/sju/prisma/article/view/19597>.

¹⁸ Netriwati, "Penerapan Taksonomi Bloom Revisi Untuk Meningkatkan Kemampuan Pemahaman Konsep Matematis," *Desimal: Jurnal Matematika 1*, no. 3 (September 30, 2018): 347–52, <https://doi.org/10.24042/DJM.V1I3.3238>.

Thinking Skill. According to Saputra¹⁹ *High Order Thinking Skills* is a process of thinking of students at a higher cognitive level that is developed from various cognitive concepts and methods and learning taxonomy such as the *problem solving*, Bloom's taxonomy, and the taxonomy of learning, teaching, and assessment. According to Vui,²⁰ *high order thinking skills* will occur when a person associates new information with information that has been stored in his memory and associates it and/or reorganizes and develops the information to achieve a goal or find a solution to a situation that is difficult to solve.

The purpose of Higher order thinking skills is how to improve students' thinking skills to a higher level, especially related to the ability to think critically in receiving various types of information, think creatively in solving a problem using the knowledge they have and make decisions in complex situations. The concept of Higher order thinking skill is taken from Bloom's Technology which has been updated by Ander and Karthwohl. The six thinking skills are:²¹

1. Remember

This ability exists at cognitive level 1 (C1). Ability to recall information that has been provided

2. Understand

This ability is at cognitive level 2 (C2). This ability relates to understanding the concepts taught, affirming ideas and instructions

3. Applying

This ability is at cognitive level 3 (C3). This ability to perform or apply information obtained under certain conditions

4. Analyzing

This ability is at cognitive level 4 (C4). This ability to decipher and separate several components of information and lead to a complete understanding

5. Evaluating

This ability is at cognitive level 5 (C5). This ability to determine the value of something based on certain criteria, or benchmarks.

6. Creating

This ability is at the very top of cognitive level 6 (C6). This ability enables components to be transformed into a new and different form, or to create a novelty.

¹⁹ Saputra, *Pengembangan Mutu Pendidikan Menuju Era Global: Penguatan Mutu Pembelajaran Dengan Penerapan HOTS (High Order Thinking Skills)*.

²⁰ Tran Vui, "Enhancing Classroom Communication to Develop Students' Mathematical Thinking," 2006, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.criced.tsukuba.ac.jp/math/apec/apec2008/papers/PDF/21.Tran_Vui_Vietnam.pdf.

²¹ Saputra, *Pengembangan Mutu Pendidikan Menuju Era Global: Penguatan Mutu Pembelajaran Dengan Penerapan HOTS (High Order Thinking Skills)*.

In the discourse of educational science in the western world, as well as Muslims, the term progressive education is almost the same as the concept of pragmatic-progressive plus religious education.

Thus, progressive education is a set of ideas, ideas, and beliefs of concepts and praxis based on the values of Islam and social life that interact with each other in a dynamic-creative-dialectical manner, the establishment of awareness of intellectual intelligence (*intelligent* and hone intelligence until it grows (*growth*) to be a whole person who is fully involved in advancing (*progress*) social life that in the end will get the good of the hereafter.²²

The Progressive Education Paradigm (Education Progressive-Religious) is a hybrid of Islam, which is functionally understood in light of the times, and education, which respects human intelligence through the process of constant reconstruction of experience. In the paradigm of progressive education, there are three central points that are the subject of the problem of progressive education, namely: reason (intelligent) as a vehicle to solve life's problems, growth (Growth) individuals as a whole, and a willingness to participate in efforts to advance social life (progress).²³ Historically, progressive education pioneered by KH Ahmad Dahlan can be divided into three stages (periods). The first period removes all obstacles to *tajdid* or renewal that will be carried out so that this period is called the period *babad alas*. During this period, KH Ahmad Dahlan succeeded in developing Langgar Kidul into a new model pesantren that was different from the pesantren at that time.

During this period, KH Ahmad Dahlan began to pioneer education with his students. There is an interesting incident when KH Ahmad Dahlan taught the letter Al-Ma'un, known as "geger Al-Ma'un". Through the teaching that KH Ahmad Dahlan pioneered to his students through the letter Al-Ma'un, in turn it became an embryo for the birth of a more mature educational structure. The second period, the embryonic period, was marked by the successful establishment of the first Islamic school with Madrasah Ibtidaiyah Diniyah Islamiyah as a modern religious school which gave birth to Muhammadiyah schools. The third period is the maturation of the structure, this period is marked by the creation of a variety of new social praxis that expands the meaning of education for life.

Al-Ma'un and Ahmad Dahlan Thoughts

Al-Ma'un is one of the letters in the Qur'an. This letter is in the 107th order consisting of 7 verses. Surah Al-Ma'un is a letter that was revealed to the Prophet in Makkah, known as the Makkiyah letter. The word Al-Ma'un is taken from the last verse of this letter. Surah Al-Ma'un is two core teachings of Islam, how one worships and how one gives. Surah discusses the character of those who claim to be Muslims but are unaware of the hereafter. These people deprive their orphans of their rights, neglect the duties of the poor, and pray without holding God as a reminder, forgetting the purpose behind prayer. Their deeds of charity are the manifestation of their false piety, because they do not give the love of God. Surah has been determined after the word al-ma'un appears at the end of the last verse. Abdullah ibn

²² Agustiar, "Relevansi Pembelajaran Higher Order Thinking Skill (HOTS) Dalam Peristiwa Geger Al-Ma'un Kh Ahmad Dahlan."

²³ Agustiar.

Masud said:

"During the time of the Prophet we used to consider ma'un (daily necessities) to lend buckets and cooking pots".

Ibn Abbas said:

"Those who neglect their prayers) are those who postpone their prayers".

There is a phenomenal story when KH Ahmad Dahlan taught the letter Al-Ma'un to his students. At one moment in the routine recitation of dawn, KH Ahmad Dahlan taught the interpretation of Surah Al-Ma'un but he taught it repeatedly. Until one of his students dared to ask "why don't you continue to other letters, even though the Qur'an has 114 letters" asked Sudjak, one of his students. Hearing his student's answer, KH Ahmad Dahlan asked again. "Do you really understand the meaning of Surah Al-Ma'un?" Then the students simultaneously answered "we don't just understand but we memorize the kyai" KH Ahmad Dahlan asked again "have you practiced the verses that you have memorized?", the students answered by turning around and asking "what kind of kyai should be practiced?, don't I have often read it when praying" KH Ahmad Dahlan replied "You have memorized Surah Al-Ma'un but that's not what I mean. Put it into practice! Practiced! It means that it is practiced, it is done," he replied. There is a special meaning for KH Ahmad Dahlan why he keeps repeating Surah Al-Ma'un, this is because he wants his students to practice this Surah Al-Ma'un.²⁴

Furthermore, KH Ahmad Dahlan ordered his students to look for the poor and orphans. They are asked to bring the poor and orphans home, then cleaned, bathed with soap, given clean clothes, and given a proper place to live. The movement to call for the fulfillment of the rights of the poor and displaced people then gave birth to a movement to manage zakat and zakat fitrah to be distributed to the poor, displaced people on the streets for various reasons. So from here were also born poor houses, orphanages, abandoned homes and hospitals.²⁵

The concept of HOTS can be said to be relevant to the progressive education developed by KH Ahmad Dahlan. KH Ahmad Dahlan emphasized intelligence very much, even he exalted intellect as quoted from Mohamad Ali's book "actually the most useful teaching for human intellect is much more needed than food that fills his stomach". Intelligence according to KH Ahmad Dahlan is the ability to understand and solve problems. In educating his students, KH Ahmad Dahlan does not only stop at memorization but must also be practiced. This concept is in line with HOTS learning which assesses memorization skills, including C1, must also be applied to C3 even to the highest stage of the cognitive level, namely creating C6. The stage of creating C6 in progressive education KH Ahmad Dahlan in this case is to participate in advancing people's lives through his charitable products such as orphanages, and even hospitals. The following is a table of Higher Order Thinking Skills in the Al-Ma'un.²⁶

²⁴ Haritza Bayu, Harya Putra, and Syamsul Arifin, "Neo Al-Ma'un Theology and Social Improvement of Society," *Paedagogie: Jurnal Pendidikan Dan Studi Islam* 5, no. 02 (July 31, 2024): 161–71, <https://doi.org/10.52593/PDG.05.2.04>.

²⁵ Saefudin Saefudin, "Transformasi Doktrin Al-Ma'un Terhadap Penguatan Gerakan Ekonomi Muhammadiyah," *Jurnal Ilmiah Ekonomi Islam* 8, no. 2 (July 19, 2022): 2120–34, <https://doi.org/10.29040/JIEI.V8I2.5354>.

²⁶ Agustiar, "Relevansi Pembelajaran Higher Order Thinking Skill (HOTS) Dalam Peristiwa Geger Al-

Table 1. Relevance Between HOTS and Al-Ma'un

Higher Order Thinking Skill	Fulfilled skills	KH Ahmad Dahlan in teaching Al-Ma'un
C1 Remembering	Ability to recall information that has been provided	KH Ahmad Dahlan taught Surah Al-Ma'un because this surah was quite short, he taught many times so that his students could memorize it.
C2 Understanding	This ability relates to understanding the concepts taught, affirming ideas and instructions	In addition to memorizing the text of Surah Al-Ma'un, he also taught the interpretation of Surah Al-Ma'un so that his students understood the information and context of Al-Ma'un
C3 Apply	This ability to perform or apply information obtained under certain conditions	The students of KH Ahmad Dahlan have applied the letter Al-Ma'un that they memorize and understand in prayer.
C4 Analyze	This ability to decipher and separate some components of information and to obtain a complete understanding	In teaching, KH Ahmad Dahlan re-sorted the meaning of the meaning in Surah al-ma'un how the letter says people who deny religion, and how people who are harmed in their prayers, to analyze that the answer to the threat in the letter is to empower the weak (mustad'afin)
C5 Evaluating	This ability to determine the value of something based on certain criteria, or benchmarks	In this phase, KH Ahmad Dahlan invited his students to see the condition of social reality whether there are still many weak people according to this letter of Al-Ma'un. KH Ahmad Dahlan invited to find them and empower them.
C6 Creating	This ability brings components together into a different new form, or creates a novelty.	Finally, through this meaning of Al-Ma'un, KH Ahmad Dahlan was able to create social charity institutions that focused on siding with the weak (poor,

		orphans). Social products such as orphanages, Zakat Infaq Shadaqoh institutions
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CONCLUSION

Education is the key to addressing the issues of the Industrial Revolution. One of the skills required in this era is the ability to sustain high-level thinking (HOTS). Progressive education, as a notion and philosophy introduced by KH Ahmad Dahlan, has taught advanced thinking since antiquity. So it can be said that KH Ahmad Dahlan's education is keeping up with the current conditions of the Industrial Revolution 4.0 age. KH Ahmad Dahlan's ideas have the potential to solve today's educational difficulties. The different philosophical ideals and concepts that he employed as a fire of renewal must continue to be researched and used in educational issues, as well as Muhammadiyah thinking through their Scholars.

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