

Research Article

Halal Literacy Profile of Class VIII Students Through Science Learning on The Subject of The Human Digestive System at SMP Edu Global School Bandung

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ABSTRACT

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Education is the process of changing someone from being unable to being able to, from not knowing to knowing. In the implementation of education there is a curriculum in order to realize educational goals. The current curriculum applies in accordance with the times, namely in the era of the 21st century. One of the curriculums in the 21st century is that students must be able to master literacy and global competition. Global competition, namely in the economic realm regarding halal. In relation to learning, the teacher must be able to integrate literacy skills with halal. Learning in schools integrates learning design with halal literacy. This study aims to determine the initial ability of halal literacy in students through science learning. The method in this study uses quantitative research methods by providing questions related to four aspects of halal literacy, namely the concept of halal and natural science, halal process, halal benefits, and attitudes. The subject of this research was class VIII students as many as 26 respondents. The results of this study show that the average percentage of halal concept aspects and IPA is 37.5%, the average percentage of halal process aspects is 45.2%, the average percentage of halal benefit aspects is 60.6%, and the average percentage of attitude aspects 39.4%. The average percentage of students' halal literacy ability is 55,05%. The results of this study can be used as a basis for research related to increasing students' halal literacy.

1. INTRODUCTION

Education is the most important aspect of the progress of a nation. The development of education must be in line with the times. In accordance with the development of 21st century learning in the 2013 curriculum, which involves direct learning, direct experience, learning according to field facts, and according to problems that exist in the surrounding environment. (Rahayu et al., 2022) (n.d.). The teacher is one of the factors to support 21st century learning. Where the teacher must have mastery and understanding regarding the applicable curriculum (Angga et al., 2022; Kustijono & Wiwin, 2014). Teacher mastery of the curriculum in order to make learning more innovative. Teacher innovation in designing learning will have an impact on the learning experience received by students (Pratycia et al., 2023).

The role of the teacher in innovating learning designs is very important. The importance of innovation in developing learning designs in order to improve the quality of education. Learning innovations that must be developed by teachers are to provide learning that is creative, fun, and able to bring students into the pact that exists in everyday life (Carayannis, n.d.; Hasim et al., 2022; Hill-Jackson & Craig, 2023; Salehudin, 2013). Learning design in the 21st century abilities leads to four abilities that must be mastered by students, namely critical thinking skills, creative thinking skills, collaboration skills, and communication skills (Elitasari, 2022; Umam & Jiddiyah, 2020). In addition, 21st century abilities also direct students to master communication literacy, technology literacy, and students are expected to be able to compete globally. (Marsela Yulianti et al., 2022; Silber-Varod et al., 2019a).



Students are also one of the factors to support the success of 21st century learning. One of the 21st century learning that must be mastered by students is an understanding of literacy and the purpose of 21st century learning, namely students are expected to be able to compete in the global era. Competition in the global era one of which is in the economic realm (Christison & Murray, 2020; Silber-Varod et al., 2019b). In the food trade economic sector, halal products are being initiated in every Muslim-majority country. 21st century learning regarding literacy that must be mastered by students and if it is related to competition in the global era, students must have insight into halal literacy. Halal literacy is the ability to distinguish food products or goods or services that are permitted in Islam or those that are prohibited by Islamic law (Krisna et al., n.d.; Kurahman et al., 2023; Maryam & Sumar'in, 2022; Nur Wahyuni et al., 2018; Pratama & Hartati, 2021a).

Halal literacy in learning must be developed to support the achievement of 21st century learning regarding competition in the global era. The low level of halal literacy in the school environment must be a concern. Because the school environment is the basic environment for implementing various things in improving the quality of the next generation of the nation (Antara et al., 2016; Ardiansyah, 2022a). So the solution given is to analyze the halal literacy profile of students in schools which are integrated into science learning.

The following is about halal literacy related to several products, both food, cosmetics and services:

1. In research (Khan et al., 2020) stated that Few researchers have attempted to study the consumer behavior of the Muslim population for halal products in India, despite the country having one of the largest Muslim populations in the world and a dearth of popular halal branded food products on the market. A large amount of research work on halal food behavior is from countries like Malaysia and Indonesia, where the Muslim population is in the majority and halal brands are already popular.
2. (M. A. Khan et al., 2021) state In addition to investigating the concept of the mediation role of price transparency for the first time, this research attempted to examine the significance of religiosity in customerbrand relationships of halal food brands. This indicates that this area has never been studied before.
3. (Rachman et al., 2022) also stated Halal Tourism Literacy has an important role to socialize that Halal Tourism is not a form of Islamization of tourism but rather an extended service in the tourism industry in Indonesia. Halal Tourism Literacy has an important role to socialize that Halal Tourism is not a form of Islamization of tourism but rather an accepted concept by all religions, societies, cultures, and governments.

Novelty from this research by focusing on an Indonesian school, the study could provide insights into how culturally relevant concepts (like Halal) can enhance students' engagement and understanding in science subjects. This could be especially relevant for designing curricula that respect local cultural and religious values. Most research on Halal literacy and education focuses on older students or adults. This study targets young adolescents, which can be novel in understanding how early science education can shape students' perceptions and comprehension of Halal concepts. The human digestive system is a relevant topic to discuss food intake, nutrition, and, by extension, Halal dietary practices. Using the digestive system as a learning context may make it easier for students to connect biological functions with everyday ethical decisions, which is a unique educational strategy. The research likely employs a novel method or instrument to assess students' Halal literacy, specifically within the context of science learning. This could include surveys, assessments, or observation techniques that measure how students understand and apply Halal principles in a scientific context, contributing to new approaches in educational research on literacy.

These aspects highlight the originality and contribution of the study to educational research by merging scientific, ethical, and religious perspectives in early adolescent education.

From previous research which states about halal literacy among the community, this study aims to determine students' initial abilities regarding halal literacy or this research will discuss the Halal literacy profile of class VIII students through science learning on the subject of the Human Digestive System at SMP Edu Global School Bandung.

2. RESEARCH METHODS

The method used is a quantitative method. According to (Sugiono, 2015) quantitative is a data collection technique by means of statistics or results regarding numerical analysis. The population and sample in this study were grade 8 students with a sample size of 32 students at SMP Edu Global Bandung. The data collection technique used was to provide eight questions with composition: two questions related to the concept of Halal and IPA regarding the substance content in food, two questions related to the Halal Process regarding the process of food processing and the process of absorption of food in the human digestive system, two questions related to the halal benefits obtained by students, and two questions related to attitudes carried out by students in applying halal to food in everyday life

(Ali Nurdin et al., 2024). The data analysis method used is descriptive analysis method by looking at the average value and the average percentage value.

3. RESULTS AND DISCUSSIONS

Based on the benchmarks for evaluating literacy according to PISA, there are four aspects, namely context, knowledge, competencies, and attitudes. Guided by PISA related to literacy, there are also four aspects that are assessed on halal literacy skills, namely the concept of halal and science, halal process, halal benefits, and attitude (Pratama & Hartati, 2021b). So the following are the results of research related to these four aspects of students, namely as follows:

1. Halal literacy ability of each student

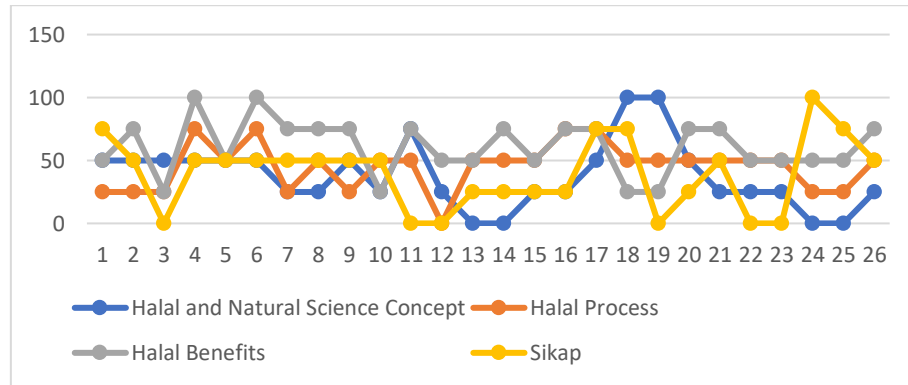


Figure 1. Graph of halal literacy ability scores for each student

Based on the graph above, it can be seen that students' halal literacy skills through science learning on the material of the human digestive system are low. However, there are some students who still have a halal literacy score in terms of attitude, halal concepts and science, and halal processes are still at 100. However, the overall percentage score is 45,675% for the halal literacy skills of class VIII students at SMP Edu Global Bandung.

2. The average ability of each aspect of halal literacy

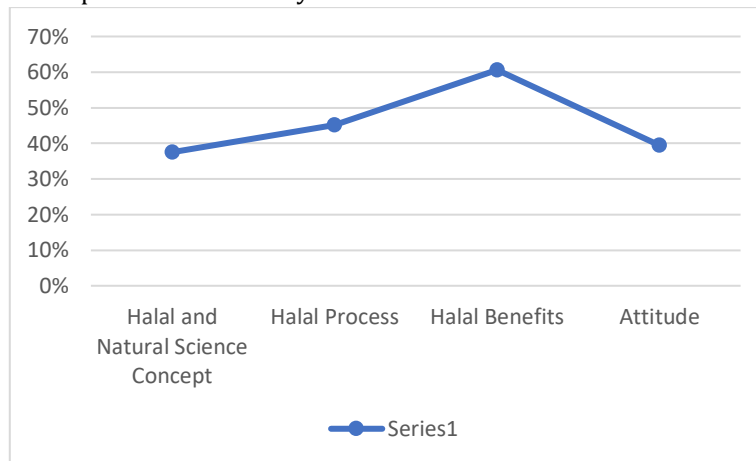


Figure 2. Graph of the average percentage score of halal literacy for each aspect of students

Based on the graph above, it can be seen that the average percentage score for each aspect of students' halal literacy ability is on aspects of halal concepts and science 37.5%, aspects of halal processes 45.2%, aspects of halal benefits 60.6%, and aspects of attitudes 39.4% of the halal literacy skills of class VIII students at SMP Edu Global Bandung.

Based on the results of the data obtained are as follows:

Table 1. The percentage of the average score of the four aspects of students' halal literacy skills at SMP Edu Global Bandung

Aspects of Halal Literacy	Average Score (Scale 0-4)	Percentage (%)
Halal and IPA concept	1,5	37,5%
Halal Process	1,8	45,2%
Halal Benefits	2,4	60,6%
Attitude	1,6	39,4%
Average Precentage Aspect of Halal Literacy		55,05%

The table above shows that the percentage of the four aspects of halal literacy is low with the average percentage value the four aspect of halal literacy 55,05%. In addition to the low halal literacy of students, the interest in halal consumption in society is increasing. So the problem that arises in the field is that students' halal literacy skills are lacking. The lack of halal literacy skills is influenced by various factors.

The factors that influence the low halal literacy of students are as follows:

1. Lack of information related to halal and the concept of halal

Information about halal products or halal concepts is lacking, this is due to the habit of applying halal insights, the habit of consuming or using products without looking at the halal side, and the lack of obtaining information related to halal insights at school and in students' homes (Ardiansyah, 2022b).

2. Lack of knowledge about halal products that are consumed every day

Students consume food without paying attention to halal information, both from the composition of the food and from the halal logo on the food packaging they consume. However, students only see the enjoyment and virality of a food (Amin Awal Amarudin et al., 2024; Ira et al., 2023; Qomaro & Hermawati, 2022a, 2022b).

4. CONCLUSION

Based on the results of the data analysis above, it can be concluded that the students' halal literacy skills at SMP Edu Global are low. The low halal literacy can be seen from the average percentage value of the four aspects of halal literacy. this study shows that the average percentage of halal concept aspects and IPA is 37.5%, the average percentage of halal process aspects is 45.2%, the average percentage of halal benefit aspects is 60.6%, and the average percentage of attitude aspects is 39.4%. The average percentage of students' halal literacy ability is 55,0%.

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REFERENCES

- Ali Nurdin, M., Miftahul Anwar, D., Cahyanto, T., Windayani, N., & Sunan Gunung Djati Bandung, U. (2024). Pengembangan indikator literasi halal: Dari teori ke ruang kelas pembelajaran IPA. *Indonesian Journal of Halal*, 7(1), 45–54. <https://doi.org/10.14710/halal.v7i1.22790>
- Amin Awal Amarudin, N. R. A., Nurun Nisaul Khusna, R. J. B., & Sri Oktavianah. (2024). Analisis literasi halal dan preferensi produk yang diboikot pada mahasiswa Universitas KH. A. Wahab Hasbullah. *Populer: Jurnal Penelitian Mahasiswa*, 3(1), 210–222. <https://doi.org/10.58192/populer.v3i1.1948>
- Angga, A., Suryana, C., Nurwahidah, I., Hernawan, A. H., & Prihantini, P. (2022). Komparasi implementasi kurikulum 2013 dan kurikulum merdeka di sekolah dasar Kabupaten Garut. *Jurnal Basicedu*, 6(4), 5877–5889. <https://doi.org/10.31004/basicedu.v6i4.3149>
- Antara, P. M., Musa, R., & Hassan, F. (2016). Bridging Islamic financial literacy and halal literacy: The way forward in halal ecosystem. *Procedia Economics and Finance*, 37, 196–202. [https://doi.org/10.1016/s2212-5671\(16\)30113-7](https://doi.org/10.1016/s2212-5671(16)30113-7)
- Ardiansyah, A. (2022b). Analisis literasi halal dalam membentuk gaya hidup islami di perguruan tinggi Islam (Studi pada mahasiswa Universitas Islam Negeri Raden Mas Said Surakarta). *Fikrah: Journal of Islamic Education*, 6(1).
- Carayannis, E. G. (n.d.). *Innovation, technology, and knowledge management series editor*. Springer. Retrieved from www.springer.com/series/8124

- Christison, M., & Murray, D. E. (2020). An overview of multilingual learners' literacy needs for the 21st century (pp. 1–21). <https://doi.org/10.4018/978-1-7998-2722-1.ch001>
- Elitasari, H. T. (2022). Kontribusi guru dalam meningkatkan kualitas pendidikan abad 21. *Jurnal Basicedu*, 6(6), 9508–9516. <https://doi.org/10.31004/basicedu.v6i6.4120>
- Hasim, S. M., Rosli, R., Halim, L., Capraro, M. M., & Capraro, R. M. (2022). STEM professional development activities and their impact on teacher knowledge and instructional practices. *Mathematics*, 10(7). <https://doi.org/10.3390/math10071109>
- Hill-Jackson, V., & Craig, C. J. (2023). (Re)Constructing teacher knowledge: Old quests for new reform. *Journal of Teacher Education*, 74(1), 5–9. <https://doi.org/10.1177/00224871221137622>
- Ira, S., Novitasari, D., & Fikriyah, K. (2023). Pengaruh literasi halal terhadap keputusan pembelian produk kosmetik halal mahasiswa ekonomi Islam se Jawa Timur. *Jurnal Ekonomi Dan Bisnis Islam*, 7. <https://doi.org/10.30868/ad.v7i01.3963>
- Krisna, R., Yusuf, M., & Putra, E. (n.d.). Analysis of the halal ecosystem and halal literacy on the development of Islamic economic halal regulation. 1(1).
- Kurahman, O. T., Priatna, T., & Cahyanto, T. (2023). Reorientation of halal literacy education development in the curriculum of Islamic educational institutions: An alternative concept. *Edukasi Islami: Jurnal Pendidikan Islam*, 12(01). <https://doi.org/10.30868/ei.v12i01.3190>
- Kustijono, R., & Wiwin, E. (2014). Pandangan guru terhadap pelaksanaan kurikulum 2013 dalam pembelajaran fisika SMK di Kota Surabaya 1). *Jurnal Pendidikan Fisika Dan Aplikasinya (JPFA)*, 4(1).
- Marsela Yulianti, D. L. A., Siti Nurfaizah, & A. P. B. (2022). Peran guru dalam mengembangkan kurikulum merdeka. *Jurnal Ilmu Pendidikan Dan Sosial*, 1(3), 290–298. <https://doi.org/10.58540/jipsi.v1i3.53>
- Maryam, A., & Sumar'in, S. (2022). Analysis of halal literacy level on halal awareness and use of halal products. *IQTISHODUNA: Jurnal Ekonomi Islam*, 11(1), 85. <https://doi.org/10.54471/igtishoduna.v11i1.1004>
- Nur Wahyuni, I., Murtini, W., & Hakim, L. (2018). Effectiveness of education module implementation on increasing Islamic financial literacy and halal literacy of MSMEs perpetrators. *Jurnal Dinamika Akuntansi*, 10(1), 51–58. <https://doi.org/10.15294/jda.v10i1.12516>
- Pratama, D. B., & Hartati, N. (2021b). Pengaruh literasi halal dan religiositas terhadap konsumsi produk halal pada mahasiswa MKS UIN Sunan Gunung Djati Bandung. *Finansha: Journal of Sharia Financial Management*, 1(2), 1–12. <https://doi.org/10.15575/fsfm.v1i2.11024>
- Pratycia, A., Dharma Putra, A., Salsabila, A. G. M., Adha, F. I., & Fuadin, A. (2023). Analisis perbedaan kurikulum 2013 dengan kurikulum merdeka. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 58–64. <https://doi.org/10.47709/jpsk.v3i01.1974>
- Qomaro, G. W., & Hermawati, E. (2022b). The young family's consumption of halal-labeled food product in Sampang. *Proceeding of Annual Conference on Islamic Economy and Law*, 1(2), 143–152. <https://doi.org/10.21107/aci.v1i2.83>
- Rahayu, R., Iskandar, S., & Abidin, Y. (2022). Inovasi pembelajaran abad 21 dan penerapannya di Indonesia. *Jurnal Basicedu*, 6(2), 2099–2104. <https://doi.org/10.31004/basicedu.v6i2.2082>
- Salehudin, I. (2013). Halal literacy: A concept exploration and measurement validation. *ASEAN Marketing Journal*, 2(1). <https://doi.org/10.21002/amj.v2i1.1987>
- Silber-Varod, V., Eshet-Alkalai, Y., & Geri, N. (2019b). Tracing research trends of 21st-century learning skills. *British Journal of Educational Technology*, 50(6), 3099–3118. <https://doi.org/10.1111/bjet.12753>
- Sugiyarti, L., & Arif, A. (n.d.). Prosiding seminar dan diskusi nasional pendidikan dasar 2018 pembelajaran abad 21 di SD. Retrieved from <https://www.pinterest.com/pin/538461699172054611/>
- Umam, H. I., & Jiddiyyah, S. H. (2020). Pengaruh pembelajaran berbasis proyek terhadap keterampilan berpikir kreatif ilmiah sebagai salah satu keterampilan abad 21. *Jurnal Basicedu*, 5(1), 350–356. <https://doi.org/10.31004/basicedu.v5i1.645>